



Study Group on Climate Change,
Migration and Human Security in Southeast Asia
26 May 2011

Organised By The RSIS Centre For Non-Traditional Security (NTS) Studies

CENTRE FOR
NON-TRADITIONAL
SECURITY STUDIES



STUDY GROUP ON CLIMATE CHANGE, MIGRATION AND HUMAN SECURITY IN SOUTHEAST ASIA

REPORT

**ORGANISED BY
THE RSIS CENTRE FOR NON-TRADITIONAL SECURITY (NTS) STUDIES**

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This report summarises the proceedings of the study group as interpreted by the rapporteurs and editors of the RSIS Centre for NTS Studies. This report adheres to a variation of the Chatham House Rule. Accordingly, beyond the speakers and paper presenters cited, no attributions have been made.

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EXECUTIVE SUMMARY

The Centre for Non-Traditional Security (NTS) Studies in the S. Rajaratnam School of International Studies (RSIS), organised a study-group meeting to address the topic of 'Climate Change, Migration and Human Security in Southeast Asia' on 26 May 2011 in Singapore. The project was funded by the MacArthur Foundation's Asia Security Initiative and represented perhaps the first efforts in Singapore to discuss the nexus of climate change and migration in an in-depth regional context. The purpose of this meeting was to examine the nature of possible climate-induced migration in the region; to consider the ways in which such migratory patterns could be framed as security issues; to critically assess what conceptions of security are most germane to the connections between climate change and migration; and to investigate how security consequences, particularly from human security perspectives, can be managed.

Presentations and discussions during the meeting revolved around several themes. The first session provided an overview of climate change, migration and human security in Southeast Asia. To this end, presenters identified and analysed current evidence on climate change and the displacement of people and communities in Southeast Asia. Professor Lorraine Elliott (Australian National University) outlined the debates relating to the intersections between climate change, migration and human security, while Professor Graeme Hugo (University of Adelaide) discussed existing knowledge on migration in Southeast Asia. Dr J. Jackson Ewing (RSIS Centre for NTS Studies) then presented analyses on the difficulties associated with drawing lines of causality between climate change and migration.

The second session assessed human insecurities caused by climate-induced migration. These included impacts on livelihoods and income, loss of social capital, impacts on traditional coping mechanisms, and implications for already marginalised groups. Case studies from Vietnam and Indonesia were presented by Ms Olivia Dun (University of Sydney) and Dr Triarko Nurlambang (University of Indonesia), respectively.

The third session discussed adaptation and responses to climate change and migration by various stakeholders. Presentations examined gendered perspectives (Dr Edsel Sajor and Dr Bernadette Resurreccion, Asian Institute of Technology), as well as the role that non-governmental organisations (NGOs) could play in addressing climate-induced migration (Ms Sofiah Jamil, RSIS Centre for NTS Studies).

The final session examined the role of institutions and governance with regards to climate change and migration, with specific discussion by Mr Robert Dobias of research underlying the Asian Development Bank (ADB) Technical Assistance Report entitled *Policy Options to Support Climate-Induced Migration*. The study group also included members of other research institutes and think tanks that have had extensive experience relating to climate change and/or migration. Points raised during the discussion highlighted the need to be sensitive to the nuanced differences in the contexts and factors relating to instances of climate-induced migration. These questions and comments were candid and served to further unpack the complexities in addressing climate-induced migration. The need for more preventive rather than reactive action by states and communities was emphasised; as was the fact that solutions to the concerns raised are in fact available but require the necessary commitment and resources to be successful. Perspectives from this study-group meeting were further disseminated during a public seminar held the following morning (27 May).

The following report is an output from the study group that summarises the proceedings and elaborates upon many of the primary issues relating to climate change, migration and human security in Southeast Asia. It is the hope of the convenors and participants that this report will prove useful to a range of stakeholders in Southeast Asia, and will contribute to stronger understanding of these important issues around the world.



WELCOME REMARKS

Professor Lorraine Elliott

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Professor Elliott opened the Study Group on Climate Change, Migration and Human Security in Southeast Asia by contextualising the RSIS Centre for NTS Studies' Climate Change, Environmental Security and Natural Disasters Programme as part of the MacArthur Asia Security Initiative Cluster 3 project on climate change and human security. She explained that each such event has sought to bring together eclectic groups of scholars and colleagues from a range of backgrounds and experiences within the field of climate change. Professor Elliott also

noted that the study group was an attempt to ensure that conversations on climate change and migration were not confined to academic circles, and that the character of the assembled participants was a direct response to that objective.

The aim of the study group was to unpack issues of climate change, migration and human security by drawing on lessons learned from this range of disciplines, backgrounds and experiences. Professor Elliott emphasised that the importance of the conversation was to identify analytical gaps, avoid duplicating existing paradigms in the field, and realign the focus to take into account aspects of the current discourse on climate change and migration that require further attention.

Professor Elliott concluded by articulating that academics and policymakers often have productive conversations about important and topical issues, but are not always as adept at answering questions such as, 'Where do we go next?', 'What does this mean in terms of policies?', 'What are the roles of a range of actors – states as well as development banks, inter-governmental organisations, NGOs – in this context?'. The most important such question, Professor Elliott suggested, is 'What does this mean for the people?', as this encompassed both the starting and ending points of the human security discourse. The tone and objectives thus set, Session 1 began to frame more thoroughly the issues of interest for the study group.

SESSION 1: An Overview of Climate Change and Migration in Southeast Asia

Climate Change, Migration and Human Security in Southeast Asia

Professor Lorraine Elliott

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The non-traditional security (NTS) concept challenges state-focused security discourses that emphasise the protection of borders through military means, the viewing of threats primarily through other military incursions, and understanding security through a threat paradigm. NTS is thus not only about expanding the agenda of security issues but also about challenging the conventional paradigm.

Secure peoples and communities also contribute to secure states. Traditional security often views people as potential causes of social disruption, political violence and civil unrest. On the other hand, a progressive security outlook that is useful for climate change should recognise that those affected are often the most vulnerable and require the attention and resources of states. This sentiment was echoed in the UN Development Programme (UNDP)'s Human Development Report of 1994, which proposed a broader agenda for security, offering human security as an antidote to a focus on a traditional security agenda long dominated by state and border-protection interests.

This gave rise to the question: how do we go about thinking of this antidote approach in terms of climate change, migration and human security? It was noted that the climate-security industry has expanded substantially over the last five years, with a host of major defence think tanks, governments and NGOs producing reports exploring the links between climate change and national security. The majority of these reports focus on the potential for conflict within and between states.

There are several ways in which climate-induced migration is presented:

The Use of Numbers

The figure of '250 million climate refugees by 2020' is one that is often cited, although the source of that figure is unclear. It was argued that there remains a dearth of good data to support such a number, but it nonetheless has been and continues to be widely reproduced,

particularly to support arguments in literature related to climate change and migration, even in high-profile reports such as the *Stern Review on the Economics of Climate Change*.

Foreshadowing Large-scale Migration between Countries and across Borders Is Frequently Presented as a Worrisome Issue

The use of alarmist phrases to describe emerging migration patterns around the world has become the norm in climate-migration literature, prompting widespread concern that such migration patterns pose significant traditional security threats. For example, the Centre for Strategic and International Studies, in Washington, DC, has described ‘massive migrations, potentially involving hundreds and millions of people ... billions ... [a] significant portion of humanity on the move ... uncontrolled migration, overwhelming traditional instruments of national security, other elements of state power and authority’. Others have conjectured that migration could occur abruptly and lead to increased social tension and civil unrest in areas receiving new migrant populations.

The Uncertain Notion of the Climate Refugee

The idea of the ‘climate refugee’ sits awkwardly and uncertainly in the context of international law because it is not defined in the International Convention on Refugees. Concerns also abound that if international law were to expand to cover climate refugees, this could undermine the normative intent of refugee law (i.e., fleeing persecution). This lack of legal codification arguably exacerbates the vulnerability of those who are displaced or compelled to move in part because of climatic changes.

The plight and interests of the people involved in these dynamics can become quickly lost in this context. From a more conventional security viewpoint, the people are seen as the source of strife and, therefore, a challenge for traditional security instruments. That is to say, the responsive migratory actions of people who are most vulnerable to climate change have been largely cast as a threat to the traditional security of receiving communities.

The human security perspective takes a different approach, advocating a move away from a focus on risk and threat to one that emphasises vulnerability and resilience. Traditional security approaches tend to create dichotomies between certain populations and perceived threats, creating ‘us versus them’ scenarios. Such an outlook often voices concern about the ways that mass climate migration would invariably affect *us* – disrupting *our way life* ... the way *we* live ... the way *we* keep ourselves safe and secure and, in extreme cases, potentially leading to ‘terrorism’. Rather than supporting a careful, nuanced analysis of the situation, the most alarmist perspectives run the risk of overreaction.

Rather than view climate refugees or migrants as a source of stress and/or pressure, the human security lens compels us to move beyond large-scale impact to consider potential individual and local ramifications of climate change. These could include loss of income, disruption of social capital, increased vulnerability for already marginalised groups, and the possible gender dimensions that often characterise population movements. The human security perspective is also concerned with the ways in which challenges such as food security and health issues may further exacerbate poverty and climate change vulnerability.

Finally, there are multiple lessons that can be learned from past and existing migration patterns. Among these are the ways in which we can find better policy and government responses, how to improve institutional practices, and how to help populations enhance their own human security as opposed to treating them as objects that need to be acted upon. Migration is only

one of a range of responses to climate vulnerability, and need not even be seen solely as a process involving one-way movement. Therefore, there is a need to think more creatively and with greater understanding about 'where the people are' in the context of climate change and migration.

Climate Change and Migration: Some Lessons from Existing Knowledge of Migration in Southeast Asia

Professor Graeme Hugo

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Climate change has brought with it relatively slow changes over the past four decades, and its effect on migration patterns is largely a subject of future conjecture rather than empirical observation. Patterns and impacts of mobility thus remain the most important considerations when looking at climate change and migration, a notion that challenges the sometimes alarmist number-based paradigm that exists today.

When assessing climate-induced mobility we must first take into consideration mobility itself, and not fall into the trap of thinking that climate change and mobility are wholly separate from other forms of migration. There are complex relationships connecting climate change and migration, and too often environmental change is presumed to directly cause migration. In fact, the reality is far more complicated. Migration is only one of many ways in which people adapt to change, typically occurring as part of an overall process rather than as a direct causal result.

More specifically, environmental factors are rarely, if ever, singular causes for migration. Migration is contingent on a complex set of factors, with the environment being a proximate one. That is to say, there is a clear distinction between people *forced* to migrate versus those who migrate to *adapt*. This difference needs to be drawn out more in the relevant literature, which tends to focus on climate-induced migration as displacement, without adequately considering the significant distinction between sudden environmental change versus environmental change over time.

Some key lessons from the 'migration as adaptation' viewpoint were also outlined:

Substantial Literature in Southeast Asia on Migration as a Coping Mechanism

Theories of family and household methods of adjustment to change (environmental, social, economic, etc.), where resources are deployed in order to maximise income and minimise risk in households, was cited as a body of knowledge quite relevant to considering the impact of climate change on future mobility. Migration responses from this perspective are mostly evaluated in terms of individuals, but it was argued that much of Southeast Asian thinking in



examining causes of migration should focus on families and communities, as they respond differently to needs and have different motivations.

The Role of Networks in Migration

A great myth of migration is that migrants go to places that are completely foreign to them, where they know no one and have no connections, and arrive wide-eyed and terrified. The reality is that both internal and international migration occurs through fairly certain corridors, where linkages between persons exist and social capital flows. This has many policy implications; it also makes it far easier to study migration if it is understood that existent pathways of communication and movement are being used.

Migration Is Almost Always a Nuanced Process

In reality, men and women migrate differently, and age, culture, background and socioeconomic difference all influence migration patterns in crucial ways. Therefore, there is no simple migration-related policy intervention that can fit all circumstances, because each individual has differing propensities and motivations to move. It was recognised that, currently, these differentiations are not present in international migration policies.

The Poor Do Not Move

One of the most overwhelming findings of recent migration studies is that, contrary to popular belief, the impoverished typically do not migrate. This is because they have few resources to facilitate migration and are averse to the risks associated with moving. Acutely impoverished populations move only when they have no other alternative and their survival (and often that of their families) depends on their movement. More generally, it was discovered that it is the better-off segments of communities who migrate, because they are able to take advantage of situations before they become serious, and adapt to changing conditions earlier. Conversely, the poorest populations are less likely to have the information, capacity and networks with which to participate in migration of their own volition.

Burgeoning Literature on Migration and Development

Until roughly 10 years ago, most migration literature was focused on the negative impacts, such as loss of human capital. More recently, however, there has been an increased focus on the positive impacts of migration, such as vibrant diasporas and remittance flows. Accordingly, it was argued that we should move away from seeing migration purely as a coping mechanism for climate change. Related to this, a major question was tabled: can climate-induced migration be seen positively, as a way of coping but also as a way of enhancing the lives of those affected, in migrant, evacuated and receiving communities?

Some key lessons from the viewpoint of migration as forced resettlement were also identified:

Last Resort

It remains crucial to see migration as the last resort and not the first line of action; and even then it could arguably still be choice-based. There is both an inevitable link between climate change and migration, and an enormous wealth of knowledge about past resettlement and displacement trends in Southeast Asia. Much of this knowledge is needed to achieve a better understanding of climate-induced migration.

Population-movement Policies

Migration is too often supported on the cheap and is often characterised by misallocation of funding, corruption and deception. Planning is fundamental to effective migration, and often, several years are needed to assess how best to overcome potential problems that result from population movements. There remains a need to empower displaced communities. For example, top-down processes often fail because they do not directly engage and empower affected communities. There also needs to be active engagement of destination communities in order to mitigate any potential negative effects and facilitate their acceptance of newcomers. Finally, there is a large body of literature based on what not to do when dealing with migration, which means that the region is not starting from scratch when it comes to taking stock of lessons learned and how best to move forward.

To conclude, migration in Southeast Asia has increased greatly in scale and diversity, and mobility is now part of the calculus of choice for most Southeast Asians. However, our knowledge regarding migration remains limited, and there is still a need for better information and understanding on these issues. But it is clear that, within existing circumstances, mobility will have a complex and important relationship with climate change in the region.

Contextualising Climate Change as a Cause of Migration in Southeast Asia

Dr J. Jackson Ewing

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This session sought to illuminate some of the difficulties associated with drawing lines of causality between climate change and migration, and to assess the attendant policy challenges created by these difficulties.

Disasters of Nature

An increasing body of scientific evidence suggests that climate change will increase the prevalence, location and power of natural disasters. Relevant natural events can thus be viewed as abrupt push factors for the line of enquiry around climate-induced migration. There are, however, several difficulties that come with this.

The modelling of climate systems has improved dramatically over the last few decades, as can be seen through the maturation of the Intergovernmental Panel for Climate Change's reports, and confidence in models is increasing. Nevertheless, pronounced uncertainties remain and these grow stronger as one moves down spatial scales of analysis. This is particularly relevant

to Southeast Asia, as it has a wide range of ecosystems, weather patterns and physical characteristics. This makes it difficult to pinpoint actual impacts of climate change, even from a natural-science perspective. On regional and sub-regional scales, it is still difficult to produce models that can explain past events, let alone future predictions. Even as the science progresses, drawing causality to climate remains a major challenge.

Social Impact

Further complicating the connections between climate change and migration is the reality that climate change impacts are heavily predicated on the social context in which climate-related events or trends occur. For example, heavy rain in a place that has lost significant forest cover thanks to agriculture or urban development faces an increased chance of soil erosion, flooding, mudslides and the like because of the ways the place has been altered by humans. Thus, when the fallout from such climatic affects is profound enough to lead to migration, one could still question the relative causal value of the climate event vis-à-vis the context in which it was actuated.

Ultimately, two concluding overarching questions were posed:

- Given causality difficulties and recognising that climate is relevant to migration, what does this mean for response and policy formulation? Further, given that it remains profoundly complicated to respond to this question, how can we reconcile these inherent difficulties?
- Urbanisation is a powerful contemporary migration trend that, for various reasons, may be accelerated by climate change. Urbanisation also accelerates a host of social changes in the region, and urban environments bring along a number of climate change vulnerabilities. As such, where does urbanisation fit into the calculus of climate change and migration, and what does this mean for policy formulation?

Discussion

During the discussion session, it was asked why the nexus between climate change and migration is being securitised, and what the parties doing this are hoping to achieve in using the language of traditional security to describe non-traditional security events.

In response, it was said that there is no certain answer to the question, but myriad responses are likely to be behind the securitisation of climate change and migration. It was argued that there is a sense in which this could be a search for a new security mission, perhaps the result of the current security paradigm seeking 'what the new threat might be'. It was also suspected that there was a genuine dimension of concern in some respects, but that this was fundamentally based on what could or would make us vulnerable.

It was counter-suggested that some reports on climate change and migration do go on to suggest how to respond to this, realigning it as an issue of prevention and protection rather than one of response; that is to say, it is ineffective to not deal with issues of climate change and migration until they evolve and become traditional security threats. However, it was reaffirmed that this does not necessarily justify emergency responses that employ extraordinary policies. The fear voiced on this point is that the securitisation of these issues threatens to disempower the people whose voices need to be heard.

It was also brought up that the language of security is used to bring a sense of urgency to issues deemed 'lazy', 'slow' or unqualified for firm and prioritised action. It was further stated that security brings a sense of alarm, and that it is important to understand that security language helps to push governments to take action. In many cases, such language is needed in order to pursue agendas to mitigate climate change.

Another question tabled during this session was why we are predicting futures under climate change instead of looking at prior patterns of climate-induced migration. It was expressed that climate migration has existed for a long time, but that because it has been voluntary it has not previously raised significant questions. It was also asked whether it was possible to formulate a clear distinction between forced and voluntary migration, given that the push factor which compels people to move to a more desirable location is often unclear. It was further suggested that studies addressing climate change and migration should contemplate the differing degrees to which migration is 'forced', 'voluntary', 'induced', 'compelled' and the like.

The unifying reality is that we are anticipating accelerated climate change in the coming decades – partly due to human factors – and therefore should anticipate greater climate change impacts on population-movement decisions. In light of this, effective policies must plan ahead for these changes and facilitate the ability of populations to make adjustments, even if these adjustments include migration. This is a major challenge, particularly given policymakers' propensity to focus on the most immediate problems that they face.

SESSION 2: Patterns and Impacts of Climate Change and Migration

Agricultural Change, Increasing Salinisation and Migration in the Mekong Delta: Insights for Potential Future Climate Change Impacts?

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In developing countries, where people often depend directly on local natural environments for their immediate income and livelihood activities, and where governments are less able to afford prevention of potential harm caused by environmental changes, the propensity towards human insecurity is greater. Viet Nam is one such country. With respect to climate change, a study comparing the potential impact of future sea-level rise in the world's developing countries identified Viet Nam as one of the countries that would be most severely impacted, particularly the Mekong Delta, in the southern part of the country.



The Case of Cai Nuoc

Cai Nuoc district in Ca Mau province, in the country's far south, was examined as a case study of how some households have become more vulnerable as a result of agricultural and environmental shifts, and thus have often turned to migrating elsewhere as a coping mechanism. Cai Nuoc is naturally prone to salinity intrusion, but over the past decade there has been evidence of increasing salinisation of surface water and soils, in large part caused by the transformation of coastal rice fields into saltwater-based monoculture shrimp farms. At the household level, these changes have had mixed outcomes, as some have been able to benefit from the changes while others have become more vulnerable.

Based on interviews conducted with about 90 families living in the district, it was found that several households had benefited from the switch because one hectare of land for shrimp farming resulted in an income up to 160 times higher than one hectare of rice. In addition, raising shrimp was less time- and labour-intensive than growing rice. On the other hand, some households became more vulnerable as a result of the switch, with financial debt increasing due to the initial financial inputs needed to implement the conversion of rice fields to shrimp ponds.

Even following initial success with shrimp production, many households began to fail because shrimp are very sensitive to their environments and need an exact balance of conditions to thrive. Shrimp disease and failure to maintain pond conditions led to households borrowing increasing amounts of money through both formal and informal channels. In turn, continually failing shrimp-farming efforts led to an inability to repay borrowed money, and economic considerations caused many households to consider migration as a means of seeking alternative income sources.

Effects of Migration

In Cai Nuoc district, two categories of migration were observed. Some households remained in their hometowns and had individual household members who migrated elsewhere for work, while others decided to move with all their household members. The latter group was identified as more vulnerable, as its members faced more significant issues in relation to human security and lack of protection.

The human security issues arising in association with whole-household migration were framed using five types of capital. In sum, the human security issues associated with whole-household migration seem to stem from deficits in natural, physical, financial, human and social capital. Individual cases will of course have unique primary causes behind moving, but overall observations consistently found the interactions of all of these capital shortcomings to contribute to household migration decisions.

It was ultimately concluded that saline-water intrusion led to increasing household-level vulnerability in Cai Nuoc. For some of the most vulnerable families, whole-household migration has become a solution to mounting debt problems arising out of their failure to successfully raise shrimp. Migrating to areas of employment potential in Viet Nam's manufacturing, processing and construction sectors has enabled these households to earn a more stable income and pay off some of their debt. However, it has also exposed household units to new areas of vulnerability, particularly in relation to health and education issues.

The long-term success of such household-migration measures is unclear. It is not certain what livelihood activities households will be able to carry out upon return to their hometowns, as the saline-water environment presents limited opportunities for agricultural and aquaculture production. What this case does effectively demonstrate, however, is that environmental changes and social contexts can interlink in the decision-making process surrounding migration. As climate change will cause both social and environmental stresses, this is particularly relevant for the focus areas of this study group.

Public Policy Matters on Climate Change and Migration in Indonesia: The Case of Jakarta City

Dr Triarko Nurlambang

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Lecturer, Department of Geography Faculty of Mathematics and Natural Science
University of Indonesia*

Transitioning from the discussion on rural landscapes, this session discussed climate change, migration and human security issues from an urban perspective, with a particular emphasis on Jakarta, Indonesia. The contrast between the two settings was useful as a way to exemplify the differences in human security needs among different



groups of people, the nature of their agency, and the role that governments and non-governmental organisations (NGOs) play in these settings.

Development Strategies in the Face of Climate Change: The Governance Challenge

Climate change is a significant topic for debate in Indonesia and the subject of an increasing level of exploration and government attention. However, the lessons accumulated have often not been adopted by public authorities, and have only limited presence in current policies, regulations and action programmes. Government authorities do have some legislative measures to act as guidelines; in the context of Jakarta, for instance, a 2009 law on environmental protection and management does provide a potential signpost for the future of development in the context of a changing climate. This law stipulates that authorities conduct strategic environmental assessments for all development and spatial plans at the national/provincial and the district/municipality levels.

Prior to the introduction of the 2009 law, the Ministry of Environment, academicians and NGOs raised concerns regarding the impacts of climate change on economic-development plans. It was suggested that climate change might cause higher environmental risk, especially to low- and middle-elevation settlement areas surrounding the project sites, calling into question the idea of land reclamation in these low-lying areas. Notwithstanding these issues, the provincial government of Jakarta, with the support of real-estate developers and ministries (such as the Ministry of Public Works and the Ministry of Transportation), persisted with reclamation projects along coastal areas as its main development agenda. Still, a change in attitude has been observed following the introduction of the 2009 law, with some positive impacts on development policies, plans and programmes leading towards a consideration of climate change and its impacts. However, lack of institutional capacity to ensure persistence and consistency to fulfil public needs remains an outstanding problem.

Government efforts have been limited in improving adaptation capabilities among those who live in vulnerable areas, and these dynamics are evident in Jakarta city. Jakarta's spatial plans and current development trends – which may create community movement patterns – reveal that climate change issues or events are not yet a primary concern among policymakers, planners or communities.

Vulnerability in Jakarta: Migratory Potential?

In Jakarta, the coastal areas are identified as the most vulnerable to climate change risk due to rising sea levels and flooding. It is suggested that the level of vulnerability along the coastal areas is likely to increase quite significantly in the next 20 years – and it is estimated that 60 per cent of Indonesia's population and 80 per cent of its industries are located in such areas. Furthermore, a 2009 study by the Economy and Environment Program for Southeast Asia (EEPSEA) noted that more than a million people in these vulnerable locations were from the low- and middle-income classes. Nonetheless, provincial governments such as that of Jakarta have continued development work, such as land reclamation, along the coast.

Using the observations derived by Armi Susandi in 2007 from his case study on Muara Baru, in North Jakarta, the following trends were highlighted. Muara Baru was the area most severely affected by flooding in 2007. Despite the risks, only about 30 per cent of surveyed households claimed to have received flood warnings – and these were from neighbours, relatives or friends a few days in advance, not from the government. While 7 per cent said that they had received help from the local government, 12 per cent were assisted by NGOs and 7 per cent by

neighbours. In terms of actual assistance after the event, 30 per cent received support from NGOs while 24 per cent received assistance from the government. Moreover, 64 per cent of respondents had never participated in any disaster-preparedness training and never received substantial information on climate change or natural hazards.

The general observation is that economic reasons currently dominate decisions to stay or migrate. For example, almost no locals moved from the affected areas in Muara Baru; instead, most remained and adapted through their own efforts, such as adjusting the positioning of their houses and interiors. Such adaptation efforts were reactions to a specific situation and are not unique responses to the impacts of climate change. These were reactions to the social impacts of the climate disaster, such as loss of employment and food. At present, however, evidence suggests that people move from or remain in affected areas due in large part to economic reasons. For example, many people choose to remain in vulnerable areas as they are lured by government reclamation plans. The prospective increase in land space is indicative of economic opportunities, and so economic reasons become a pull factor to stay. As climatic shifts have the proven potential to affect economic conditions, it is likely that climate change will affect migration patterns in Jakarta primarily through economic channels.

Discussion

A range of actions and strategic approaches were proposed in response to the issues raised during this session. For instance, there should be a continuation and focus on climate change education and research, especially to serve and influence targeted stakeholders. Importantly, these efforts should extend to programmes focused on relief for climate change impacts. In addition, there must be a strengthening of fair, objective and accountable policymaking and institutional capacity. A vulnerability index, based on climate change impacts, should also be developed and maintained as part of a public accountability system. Finally, there is a need to balance economic priorities currently informing the mainstream audience with the promotion and development of sustainable development.

SESSION 3: Adaptation and Responses to Climate Change and Migration

The Smokescreen Effect: Climate Change and Current Discourses on Gender and Migration

Dr Edsel Sajor*

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**Joint paper with Dr Bernadette Resurreccion, SERD, AIT*

Climate Change and Migration: Increasing Securitisation of the Debate

Climate change has the potential to become a threat multiplier, exacerbating existing tensions and potentially creating new ones over time. However, establishing a clear linear and causative relationship between climate change and migratory movements is fraught with difficulties, since the evidence from past studies is inconclusive and migration results from a confluence of factors and conditions.

Alternative views and past studies hint at a more complex configuration of drivers behind responses to climate change, of which migration is only one of many options. However, environmental and climate factors can exacerbate the social, economic and political drivers of migration, and thus become a significant push factor. Therefore, there are inherent difficulties in predicting with any precision how climate change will impact on population movements. This is partly because of the relatively high level of uncertainty about the specific effects of climate change, and partly because of the lack of comprehensive data on migration flows, especially movements within national boundaries in low-income countries. This predicament underlies the quest for recognition in international law of 'environmental refugees' or 'climate refugees' (critics argue that the term 'refugees' is misleading and too narrow since it focuses on only one of many potential push factors).

Consequently, the basis upon which to posit climate-induced migration as a security risk has come under severe challenge. The traditional securitisation of the issue hides more than it reveals of the complex workings of climate change on people's coping decisions, welfare and livelihoods. Careful analysis is required to explore the connecting pathways between environmental factors, social contexts and decisions to migrate. When relatively comprehensive approaches to these issues are absent, the multi-faceted nature and causes of migration are often hidden. For example, in Viet Nam there were some cases of families 'selling' their young daughters for commercial sex work in Cambodia, instead of migrating, in order to generate income. Such an approach blurs the merits of voluminous scholarship that focuses on and addresses complex and differentiating dynamics behind migration, as well as gender and migration. Finally, the securitisation of climate-induced migration deflects attention from further



understanding the nature of social vulnerability, the workings of power, and governance at various scales and as it relates to different genders, races and ethnicities.

This 'smokescreen', based on the traditional securitisation of climate-induced migration, undermines the potential to understand the varied responses to the effects of climate change and the implications these may have for human security. More importantly, regulatory mechanisms generated are likely to be counter-productive. These build institutional limitations, for example, such as excessive enforcement at migrant destination points, rather than lead to a consideration of the issues that may arise within the movement of the migrant from the point of origin. The discourses on climate-induced migration may deploy and strengthen security apparatuses that will thwart and control migration in ways that are inimical to the long-term well-being and livelihood of vulnerable groups.

The Gender Challenge: Understanding Vulnerability and Adaptation in Migration in the Context of Climate Change

A gendered analysis offers a deflection from the usual alliance of women and vulnerability, and seeks to contest established constructions. For instance, identifying female migrants as a particularly vulnerable group reflects an essentialist perspective, which, coupled with the impact of constructions of legality and illegality, can inhibit the resettlement of migrants. For example, following Typhoon Ketsana in Metro Manila, it was seen that those who were deemed legal migrants were given institutional aid and recovered from the crisis within seven months; whereas those deemed 'illegal' were refused institutional aid and struggled for far longer. Therefore, a gendered analysis can potentially soften regulations that are limited to narrow classifications of migrants as legal or illegal, and instead allow a more nuanced enquiry into migrant plights.

Vulnerability is not an intrinsic characteristic, nor is it derived from a single factor such as 'being a woman' or 'being a migrant'. Rather, it indicates historically influenced patterns of practices, processes and power relations that render some groups or persons more disadvantaged than others. A gendered perspective will enhance the study of 'adaptation', as it focuses upon a migrant's capacity (differentiated by gender and social group) to anticipate, cope with, resist and recover from the impact of a disaster, particularly through their networks, resources and spatial mobility. Vulnerability is a dynamic condition contingent upon existing and emerging inequities in resource access and distribution between migrant women and men, the control they can exert over choices and opportunities, historical patterns of gendered domination and marginalisation, and their hazard-related adaptive responses. Hence, the gendered perspective encourages an investigation of the social, historical, spatial and cultural processes by which the lives of people – migrants – come to be gendered, disciplined and regulated as women and men.

The Role of NGOs in Responding to Climate Change and Migration

Ms Sofiah Jamil

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Singapore



Assorted Perspectives on NGOs

As with all NTS issues, it is clear that addressing climate change requires solutions beyond state capacities, and necessitates engagement with stakeholders from across various levels and sectors. NGOs make up a significant part of this milieu of actors.

NGOs may take many different shapes. They can be bases for generating knowledge as part of an epistemic community, a network of professionals with recognised expertise in a particular domain and an authoritative claim to policy-relevant knowledge. NGOs can also play an advocacy role, whereby they act as ‘transmission belts’ in disseminating information and framing issues for various stakeholders in order to enhance multi-stakeholder participation. This role is significant for increasing awareness on specific issues, particularly regarding climate-related issues given that the technical jargon used in scientific climate reports needs to be translated into language that is more easily digestible for public consumption.

NGOs serve an important complementary role to state actions, by rendering public services and building capacity when states’ capacities are stretched in meeting the needs of the people. This may come in the form of humanitarian aid but also, increasingly, as adaptation and disaster-risk-reduction measures as a means of being better prepared in the face of more frequent or increasingly intense climate events. NGOs are also able to engage various sections of society and facilitate the implementation of government policies at the local level, which could be very useful in the context of climate change, migration and human security challenges.

NGO Intervention in Climate-induced Migration Scenarios

Based on the literature of climate change and migration, there are varying degrees of climate-induced migration, which would require different responses. Several studies have noted differences between ‘slow-induced migration’ (which may occur as a result of sea-level rise, water and natural-resource depletion, declining fish stocks, deforestation and the negative effects of rising temperatures upon human health) and acute onset migration, which is triggered by extreme-weather-related events such as cyclones and flooding, as witnessed recently in Pakistan and Bangladesh. At the same time, studies have also noted the varying ability among communities to migrate. While some note that migration is seen as a *failure* of adaptation, others see it as a *means* of adaptation. Regardless, it has been agreed that the most vulnerable communities often do not have the option of migrating at all.

In terms of responses, however, there are various stages of the migration-management cycle at which various interventions can be made by NGOs to address climate migration and facilitate long-term sustainable development. The stages include preventing migration by increasing adaptive capacities, preparing for instances of possible displacement and relocation, managing mass migration, mitigating the impact of forced migration, and addressing forced migration via durable solutions. These are areas in which various NGOs with specific expertise, skills and capacities can play significant roles.

In particular, NGOs can play an important role in facilitating initiatives for disaster risk reduction and adaptation that are designed for poor and vulnerable communities. An important adaptation initiative would be social safety nets, which would be essential as a means of reducing one's losses as a result of climate hazards, and is feasible in most scenarios. Establishing social safety nets at the grassroots level, in particular, would also be potentially more effective and sustainable than more top-down approaches. Existing micro-finance and micro-insurance schemes, for instance, could be used to facilitate such initiatives.

Protecting the rights of migrants represents another potential role for NGOs in climate-induced migration. It is often the case that communities are affected by crop failure due to extreme changes in weather patterns. As an adaptive measure, rural households might send a family member to the nearest city to find a job as a means to offset the reduced household income. However, this trend can expose these migrants to human insecurities, particularly if they lack the necessary skill sets or have little insurance when migrating to the city. While NGOs for the most part have been dealing with issues of labour migration, tapping their expertise in trends of migration into urban areas would be useful as a means of building on existing knowledge.

Given the increasing realisation that many Southeast Asian megacities are highly vulnerable to climate change, there have been ongoing government efforts to reduce pressures on these megacities via the development of 'satellite cities'. NGO support for this approach could take advantage of the knowledge of urban development that many already possess. In this regard, NGOs would play an important role in identifying and filling gaps that have been left by provincial and local governments, including socio-environmental concerns that have been left on the policy periphery.

NGOs must continue to maximise their networks in creating greater awareness and action on the crosscutting issues related to climate-induced migration. This is vital, as climate-induced migration will first and foremost affect local communities, which ought to be the main stakeholders to be engaged and assisted.

Discussion

The sessions showed that the barriers between urban and rural settings are becoming more elastic, especially with the growth of peri-urban settings. Each of the presentations identified a complex relationship between the push and pull factors of climate change with regards to the migration of people. This disallows *a priori* categorisation of the balance between these factors to pre-empt migratory patterns.

The discussion centred on the coping strategies for climate change at both individual and community levels, as well as municipal and national levels. Engaging with the differentiated dynamics that exist among these different levels of analysis is critical for efforts to address both climate change and migration, along with the pathways that connect them.

The Character of Natural Disasters and the Place of Climate Change

Although natural disasters and climate change are connected and sometimes overlapping, it is important to differentiate the two when formulating response strategies. The former is usually more immediate, while the latter is a slow and gradual process that may take decades before its impacts begin to affect the population and environment. In view of the complicated nature of climate change, it was suggested that proper coping strategies for climate change consist of the short term and long term, with the former focusing on humanitarian relief and the latter on preparedness and adaptation.

The recent complex emergency unfolding in Japan was cited in the discussion to illustrate the importance of coordination and information-sharing in successful relief efforts. Well-coordinated relief operations can serve the needs of affected population groups more effectively. Good preparedness and proper adaptation can help people to survive and recover relatively quickly from a disaster. According to a survey on five countries in East Asia, well-educated people are better at coping with the impacts of climate change. Education is thus crucial for enhancing the awareness and capability of people in adopting proper strategies. Moreover, it was suggested that adaptation be transformed from reactive to proactive, such that people are taught to use early-warning information to plan their adaptation strategies ahead of disasters.

Particular efforts should be made to empower disadvantaged communities, such as senior citizens and women. Since the elderly are usually unable to adapt as quickly as young people, and women are often denied equal access to opportunities and resources, they are typically the hardest-hit groups when disasters strike. Therefore, these groups need special assistance to get prepared.

Economic Considerations in the Urban-Rural Discourse

Due to economic development and the impacts of climate change, people in rural areas are migrating to cities where employment opportunities and infrastructure are better. As a result, many mega-cities have appeared in developing countries. This surge in population density has stretched the capability of many cities to provide basic services, thus making people more vulnerable to climate change. However, as economic development has been viewed as the top priority in many developing countries, economic considerations are the key factor in shaping adaptation strategies.

The discussion on relocating the national capital of Indonesia reflects such a problem. It was articulated that one of the key reasons for relocating 'Jakarta' was easier and cheaper access to oil, and that the relocation could thus support the development of the new capital. This proposal also indicates that the Indonesian government is taking measures to cope with climate change. However, it was also noted that the adaptation strategy of Indonesia is fragmented and insufficiently coordinated because there are many actors involved in the adaptation projects, including government agencies, NGOs and private companies.

SESSION 4: Institutions and Governance

ADB's Role in Addressing Climate Change and Migration

Mr Robert Dobias

*Senior Advisor and Head
Climate Change Coordination Unit
Regional and Sustainable Development
Department
Asian Development Bank (ADB)
The Philippines*

This presentation introduced some climate change initiatives of the Asia Development Bank (ADB) and outlined the organisation's possible roles in addressing challenges in climate change and migration.



An Overview of the ADB Initiatives on Climate Change

As the leading regional organisation for development, the ADB contributes to regional efforts to address challenges related to climate change. The ADB started working on climate change almost 20 years ago. It views climate change as a development issue and thus has placed it at the centre of its long-term strategic framework, Strategy 2020.

Based on the analysis of priorities in the Asia-Pacific, the ADB has identified five priorities and employed three modalities for helping countries in this region. The five priorities are scaling up clean energy, encouraging the development of sustainable urban transport, managing land use and forests, climate-resilient development, and strengthening governance and capacity-building. The three modalities include mobilising financing, disseminating knowledge and fostering partnership.

The Goals and Roles of the ADB

The way that the ADB has envisioned its role regarding climate change and migration is in line with its emerging thinking about how to deal with the social dimensions of climate change. The ADB is exploring several possible roles to play in this issue area. First, it enters into partnerships with countries, civil society organisations (CSOs), the private sector and others to carry out projects and programmes. With regard to the relationship with CSOs, the ADB could serve as a bi-directional bridge, relaying messages between policymakers and people at the grassroots level. Second, it supports the design of innovative financing options and identifies available climate-related funds from multiple sources.

Third, it utilises its convening power to bring together stakeholders both inside and outside the region, and can use this to help raise awareness among decision-makers in the region about climate-induced migration. It can also help change biased attitudes towards this issue and disseminate the view that migration can be employed by people as a coping mechanism to deal appropriately with the negative socio-economic consequences of climate change. It supports policy development through dialogue with regional, national and sector leaders, and through this

dialogue can be a helpful voice for incorporating social dimensions of climate change, such as climate-induced migration, into decision-making at the highest levels.

CLOSING DISCUSSION AND REMARKS

Presentations and discussions by the study group went a long way towards clarifying the nature and primary characteristics of the nexus between climate change and migration. One point that was clear at the outset, and reinforced during the discussions, is that it is important to carefully define the scale, space, process and language in relation to climate change and migration. Other topics touched upon by the study group included funding, empowerment of women, education and knowledge dissemination, institution-building, timeframe, planning processes and engagement strategies.

It was noted that Southeast Asia could be an interesting research focus because migration as a solution to climate change is still seen as negative in the region. Hence, research from a new perspective could influence regional attitudes towards migration in a positive way. While discussions centred largely upon various gaps in knowledge and uncertainties requiring attention, the study group did coalesce around some findings in two particular categories.

Policymaking Should be Transformed towards Preventive and Forward-looking Approaches

Climate change is not a problem only of developing countries. Developed countries such as Australia are also impacted. Hence, climate change needs to be taken into consideration when governments are making decisions over development issues such as land use. As noted earlier, climate change is a long and gradual process, and so the focus should not be limited to the most immediately at-risk areas. It is equally important to plan ahead; decision-making should be based on forward-looking analysis. Moreover, effective prevention based on appropriate knowledge could reduce the harm and loss caused by climate change.

Migration may be regarded as both a favourable and unfavourable response to climate change. In Southeast Asia, excessive migration to mega-cities has become a significant issue. A new (re)settlement system that is planned 40 years ahead is needed to accommodate the demand induced by climate change and by new forms of economic growth. Such foresighted planning is certainly difficult when considering uncertainties about how climatic shifts will affect localised conditions, as well as how people will react to the changes in climate that do occur. As such, projected climate-related trends should be integrated into wider development-planning agendas, and contingencies formulated that can pre-empt some of the challenges of climate-compelled population movements.

Attention Should Also Be Given to Climate-induced Cross-border Migration

Cross-border migration is a relatively under-addressed issue compared to internal migration. Some in the study group articulated the view that the Responsibility to Protect (RtoP)¹ should be extended to cover issues of climate change. It was claimed that third countries and the international community should find ways to accommodate people displaced by climate change.

¹ The Responsibility to Protect was first advanced by the International Commission on Intervention and State Sovereignty (ICISS) report in 2001. It emphasises the state's primary responsibility to protect its people from four mass atrocities: genocide, war crimes, crimes against humanity and ethnic cleansing. The international community has the responsibility to assist the state in fulfilling its responsibility. If the state is unable or unwilling to protect, the international community can take over the responsibility.

However, this issue is sensitive, as it is feared that climate change may become increasingly politicised in the context of migration, requiring the creation of complex legal instruments. In exploring issues of cross-border migration, the discussion also touched on concerns about sovereign sensitivities in the Asia-Pacific.

The final theme of the concluding discussion was that policymakers and researchers should not lose sight of the links between development policies, migration and the impact of climate change. This reinforces the importance of understanding climate migration through a more broad-based human security lens, rather than the narrow focus of social tension, political instability and conflict.

PROGRAMME

26 May (Thursday)

08:45 – 09:00

Registration

09:00 – 09:15

Welcome Remarks

Prof. Lorraine Elliott

Visiting Senior Fellow and Advisor

Climate Change, Environmental Security and Natural Disasters

Programme

Centre for Non-Traditional Security (NTS) Studies

S. Rajaratnam School of International Studies (RSIS)

Nanyang Technological University (NTU)

Singapore

And

Professor

Department of International Relations

School of International, Political and Strategic Studies

College of Asia and the Pacific

Australia National University (ANU)

Canberra, Australia

09:15 – 10:15

Session 1: An Overview of Climate Change and Migration in Southeast Asia

Climate Change, Migration and Human Security in Southeast Asia

Prof. Lorraine Elliott

Visiting Senior Fellow and Advisor

Climate Change, Environmental Security and Natural Disasters

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College of Asia and the Pacific

Australia National University (ANU)

Canberra, Australia

Climate Change and Migration: Some Lessons from Existing Knowledge of Migration in Asia

Dr Graeme Hugo
Australian Research Council (ARC) Australian Professorial Fellow
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Contextualising Climate Change as a Cause of Migration in Southeast Asia

Dr John Jackson Ewing
Post-Doctoral Fellow and Coordinator
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Nanyang Technological University (NTU)
Singapore

10:15 – 11:15

Session 2: Patterns and Impacts of Climate Change and Migration

Agricultural Change, Increasing Salinisation and Migration in the Mekong Delta: Insights for Potential Future Climate Change Impacts?

Ms Olivia Dun
PhD candidate
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Public Policy Matters on Climate Change and Migration in Indonesia: The Case of Jakarta City

Dr Triarko Nurlambang
Director/Head
Research Center for Applied Geography
University of Indonesia

11:15 – 11:30

Break

11:30 – 12:30

Session 3: Adaptation and Responses to Climate Change and Migration

The Smokescreen Effect: Climate Change and Current Discourses on Gender and Migration*

Dr Edsel Sajor

Associate Professor

Coordinator, Urban Environmental Management,

School of Environment, Resources and Development (SERD)

Asian Institute for Technology (AIT)

Thailand

**Joint paper with Dr Bernadette Resurreccion, SERD, AIT*

The Role of NGOs in Responding to Climate Change and Migration

Ms Sofiah Jamil

Associate Research Fellow

Centre for NTS Studies

S. Rajaratnam School of International Studies

Nanyang Technological University

Singapore

12:30 – 14:30

Lunch

14:30 – 15:30

Session 4: Institutions and Governance

ADB's Role in Addressing Climate Change and Migration

Mr Robert Dobias

Senior Advisor and Head

Climate Change Coordination Unit

Regional and Sustainable Development Department

Asian Development Bank

The Philippines

15:00 – 15:30

Closing Discussion and Remarks

Prof. Lorraine Elliott

Visiting Senior Fellow & Lead Researcher

Climate Change, Environmental Security and Natural Disasters
Programme

Centre for NTS Studies, RSIS, NTU

Singapore

- End of Study Group Meeting -

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ABOUT THE RSIS CENTRE FOR NON-TRADITIONAL SECURITY (NTS) STUDIES

The **RSIS Centre for Non-Traditional Security (NTS) Studies** conducts research and produces policy-relevant analyses aimed at furthering awareness and building capacity to address NTS issues and challenges in the Asia-Pacific region and beyond.

To fulfil this mission, the Centre aims to:

- Advance the understanding of NTS issues and challenges in the Asia-Pacific by highlighting gaps in knowledge and policy, and identifying best practices among state and non-state actors in responding to these challenges.
- Provide a platform for scholars and policymakers within and outside Asia to discuss and analyse NTS issues in the region.
- Network with institutions and organisations worldwide to exchange information, insights and experiences in the area of NTS.
- Engage policymakers on the importance of NTS in guiding political responses to NTS emergencies and develop strategies to mitigate the risks to state and human security.
- Contribute to building the institutional capacity of governments, and regional and international organisations to respond to NTS challenges.

Our Research

The key programmes at the **RSIS Centre for NTS Studies** include:

- 1) Internal and Cross-Border Conflict Programme
 - Dynamics of Internal Conflicts
 - Multi-level and Multilateral Approaches to Internal Conflict
 - Responsibility to Protect (RtoP) in Asia
 - Peacebuilding
- 2) Climate Change, Environmental Security and Natural Disasters Programme
 - Mitigation and Adaptation Policy Studies
 - The Politics and Diplomacy of Climate Change
- 3) Energy and Human Security Programme
 - Security and Safety of Energy Infrastructure
 - Stability of Energy Markets
 - Energy Sustainability
 - Nuclear Energy and Security
- 4) Food Security Programme
 - Regional Cooperation
 - Food Security Indicators
 - Food Production and Human Security

5) Health and Human Security Programme

- Health and Human Security
- Global Health Governance
- Pandemic Preparedness and Global Response Networks

The first three programmes received a boost from the John D. and Catherine T. MacArthur Foundation when the RSIS Centre for NTS Studies was selected as one of three core institutions to lead the MacArthur Asia Security Initiative in 2009.*

Our Output

Policy Relevant Publications

The **RSIS Centre for NTS Studies** produces a range of output such as research reports, books, monographs, policy briefs and conference proceedings.

Training

Based in RSIS, which has an excellent record of post-graduate teaching, an international faculty, and an extensive network of policy institutes worldwide, the Centre is well-placed to develop robust research capabilities, conduct training courses and facilitate advanced education on NTS. These are aimed at, but not limited to, academics, analysts, policymakers and non-governmental organisations (NGOs).

Networking and Outreach

The Centre serves as a networking hub for researchers, policy analysts, policymakers, NGOs and media from across Asia and farther afield interested in NTS issues and challenges.

The **RSIS Centre for NTS Studies** is also the Secretariat of the Consortium of Non-Traditional Security Studies in Asia (NTS-Asia), which brings together 20 research institutes and think tanks from across Asia, and strives to develop the process of networking, consolidate existing research on NTS-related issues, and mainstream NTS studies in Asia.

More information on our Centre is available at www.rsis.edu.sg/nts

** The Asia Security Initiative was launched by the John D. and Catherine T. MacArthur Foundation in January 2009, through which approximately US\$68 million in grants will be made to policy research institutions over seven years to help raise the effectiveness of international cooperation in preventing conflict and promoting peace and security in Asia.*

ABOUT THE S. RAJARATNAM SCHOOL OF INTERNATIONAL STUDIES (RSIS), NANYANG TECHNOLOGICAL UNIVERSITY

The S. Rajaratnam School of International Studies (RSIS) was inaugurated on 1 January 2007 as an autonomous School within the Nanyang Technological University (NTU), upgraded from its previous incarnation as the Institute of Defence and Strategic Studies (IDSS), which was established in 1996.

The School exists to develop a community of scholars and policy analysts at the forefront of Asia-Pacific security studies and international affairs. Its three core functions are research, graduate teaching and networking activities in the Asia-Pacific region. It produces cutting-edge security related research in Asia-Pacific Security, Conflict and Non-Traditional Security, International Political Economy, and Country and Area Studies.

The School's activities are aimed at assisting policymakers to develop comprehensive approaches to strategic thinking on issues related to security and stability in the Asia-Pacific and their implications for Singapore.

For more information about RSIS, please visit www.rsis.edu.sg.

CENTRE FOR
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