GRADUATE STUDENT RESEARCH
Researching Climate Change and Vulnerability across Mainland Southeast Asia

The graduate research presented in this interactive poster session covers a range of topics related to urban climate resilience and vulnerability in the four mainland Southeast Asia countries of Cambodia, Myanmar, Thailand and Vietnam.

Furqan Asif, *PhD Candidate, University of Ottawa*, "Leaving the Coast: The Interplay of Migration, Well-being and Resilience in Cambodian Coastal Fishing Communities"

The landscape, both socially and ecologically, of coastal fishing communities in many parts of the world is rapidly changing, particularly in Southeast Asia. On the social side, migration by individuals from coastal communities to cities in pursuit of economic opportunities is affecting community dynamics. Ecologically, environmental degradation, overexploitation of fish stocks and climate change are negatively affecting species' abundance and diversity, thereby straining livelihoods and exacerbating poverty. These trends are particularly pronounced in the small-scale fishing communities of Cambodia, a country that boasts, by some estimates, the highest fish consumption in the region. Coastal Cambodia is an ideal case to analyze and understand the dynamics that influence social-ecological change given the rapid shifts occurring as a result of emerging economic opportunities (i.e. increasing connectivity and resultant migration to secondary cities) in the context of declining natural resources. Until recently, work on resilience has traditionally been biased towards the ecological with social aspects left relatively under-addressed. Using a mix of qualitative methods, this research draws on the social well-being approach to operationalize resilience and contribute to the understanding of social resilience for small-scale coastal fishing communities in Cambodia. Specifically, the study seeks to understand a) the role migration plays as a livelihood strategy in Cambodian fishing communities; b) how migration affects social well-being of fishers and their households (within and beyond coastal villages); and c) if a social wellbeing analysis of migration can contribute to an improved understanding of the "social" in social-ecological resilience.

Angelica de Jesus, *PhD Candidate, Geography and Planning Department, University of Toronto*, "The Cascading Impacts of Migration and Climate Change: Experiences of Myanmar Labour Migrants in Phuket, Thailand"

Climate change effects, such as rising temperatures, flooding and drought, are continuously affecting people all over the world. Climate change is also happening at a time when an increasing number of people are moving from one country to another. Thousands of Myanmar migrants continue to cross the border into Thailand in search of new opportunities. Phuket, Thailand is undergoing urbanization and is calling upon labourers from bordering countries such as Myanmar to help 'build up' the popular tourist destination. Nevertheless, Myanmar labour migrants are often marginalized and exploited in their daily working and living situations in Thailand. They often take on difficult jobs and live in makeshift housing in substandard communities.

As a PhD candidate in Planning at the University of Toronto, I have recently documented experiences of Myanmar labour migrants in Phuket, Thailand in order to understand how social constructs, such as gender, class, residency status, ethnicity, place and family shape labour migrants' lives in Phuket—especially with regards to climate change effects such as water supply shortages and flooding. I am analyzing how Myanmar migrants in two communities understand, experience and respond to such problematic situations. My poster showcases my research methods and experiences with conducting cross-cultural research. I highlight my research process and lessons; and identify some preliminary observations about the struggles and successes of Myanmar migrants in Phuket. My overall research objective is to bring attention to the challenges linked to the unfavourable living conditions of Myanmar migrants in Phuket and how the global phenomena of migration and climate change impact Myanmar labourers' socioeconomic development in Thailand.

Carli Melo, *Masters Candidate, Geography and Planning Department, University of Toronto,* "Enclaves of Capital in Myanmar: Urbanization and the Dawei Special Economic Zone"

The Dawei Special Economic Zone (SEZ) in southeastern Myanmar (Burma) is slated to be the largest industrial complex in Southeast Asia. Funded by the governments of Myanmar, Thailand and Japan, this multi-billion dollar deep-sea port, industrial estate and infrastructure project will establish the small coastal city of Dawei as a node on the Asian Development Bank's regional economic corridor network. Given the Dawei SEZ's unique position to facilitate large-scale capital accumulation, the governments of Myanmar and Thailand, and the Greater Mekong Sub-region at large, are using regulatory mechanisms, including national and regional policies and programs, to justify the project. This research paper argues that the development of the Dawei SEZ is driving contemporary urbanization – defined as a process of socio-spatial transformation – and giving rise to uneven development. Dawei and Karen villagers are being dispossessed of their land and livelihoods as a direct result of construction and an indirect result of speculation. Land grabbing, enabled by the state, is reorganizing labour dynamics as people are expelled from agriculture without being absorbed elsewhere in the economy. Impacts from the project are also being felt on Dawei City's infrastructure and economy. Private investors are rushing to develop the City in anticipation of an increase in tourists and workers, driving up land and housing prices. These processes are having negative impacts on the local rural population and urban poor, which are being worsened by ineffective municipal governance and planning systems. This paper proposes recommendations to the Myanmar government to address the growing challenges facing the area's vulnerable populations.

Ho Kim Thi, *Faculty of Geography, University of Social Sciences and Humanities, Vietnam National University*, "Assessing Livelihood Resilience and Vulnerability to Climate Change of Khmer Households in Soc Trang City, Mekong Delta Region"

Soc Trang is one of the coastal provinces in the Mekong Delta Region that suffers most from climate change. Locals are facing huge challenges in their livelihoods caused by climate change that has been occurring more frequently with enhanced intensity and an expanded scale of disasters, which was unusual, unprecedented and unpredictable.

Furthermore, Soc Trang province has nearly 400,000 Khmer people with a rate of 36.2 per cent living below the national poverty line. The Khmers' livelihoods depend on subsistence crop cultivation and livestock farming with conventional farming methods, among which rice is the main crop and the most salt sensitive amongst cereals. In the urbanization area, most of the Khmers changed from traditional agricultural modeling to livelihood diversification. Consequently, migration has been a common livelihood strategy of Khmer young people. Therefore, this research aims to assess livelihood resilience and vulnerability to climate change of the Khmer households in Soc Trang city. With a combination between quantitative and qualitative approaches, the expected results of this research will contribute to understanding about their adaptive behavior. Secondary data will be collected from censuses such as the population and housing census, and the agriculture and food census, and weather reports. Other relevant data will be gained from policy documents and other case study research projects. Primary data will be obtained from a questionnaire survey of 360 Khmer households. In-depth interviews will be conducted with semi-structured questions at three study sites to collect deeper comments of the stakeholders. This research will deeply focus on the aspects of indigenous culture and social capital of the Khmers, which could play important role in their adaptive capacity. Therefore, the development of better understanding about the livelihood resilience and vulnerability of Khmer households to climate change would be implications for the policy makers to create compatible adaptive strategies to support Khmers at Soc Trang to respond successfully to climate change and urbanization.

Try Thuon, *PhD Candidate, Chiang Mai University*, "Fostering Urban Resilience Among People in Battambang, Cambodia"

This poster presents the historical, the strategic location and national and regional connectivity of Battambang town and its historical process of urbanization. Population in the town has increased rapidly where in some Sangkat (communes) with population over 7000/km2.

With its strategic location by connecting all provinces surrounded Tonle Sap Lake, Phnom Penh and Thailand, the town is now being transformed into an agro-industrial hub, tourism attraction and competitive city for public, manufacturing, industrial zones and incentive for private sector investment.

However, emerging problems through this process are also inevitable. These include the nature of town land use planning, the preservation of colonial buildings and ancient temples, climate change impacts, water and waste, and urban slums management. These problems post challenges to future urban resilience, risks and the nature of knowledge production among key actors involved. Key questions to be addressed in this poster include:

- How different groups of peoples (urban slumps and poor communities, old town residents and middle class) who live in Battambang adapt to climate change?
- What are the social network of vulnerable in Battambang in response to urban climate change adaptation?