





My APN Journey

Sharing My Experience as a PDTW Participant, CRRP Grant Recipient 24/25
and APN-ECAP Advisory Member

 Dr. Wan Shafrina Wan Mohd Jaafar

 APN-ECAP and APN Call for Proposal 2025
2025  October 24, 2025



About Me and My APN Journey



Dr. Wan Shafrina Wan Mohd Jaafar

APN-ECAP Advisory Group Member



Head, Earth Observation Centre, Institute of Climate Change, Universiti Kebangsaan Malaysia



Researcher focusing on Environment and Climate Change particularly in the field of Land Use Land Use Change and Forestry using Geospatial Technology



Professional with experience in knowledge systems and governance

My APN Journey



Interest in Climate Change and Environment

My journey with APN began with a deep interest in , focusing on improving knowledge systems, governance, and regional cooperation in the Asia-Pacific region.

Proposal Development Training Workshop (PDTW) 2023



Workshop Overview

- Location:** Bangkok, Thailand
- Dates:** May 22-24, 2023
- Co-located with:** 13th SEA SRC meeting, Youth Professional Exchange, and WATSAT water security training

Workshop Significance

This workshop provided valuable learning opportunities and laid the foundation for my subsequent success in obtaining the CRRP grant.



Key Workshop Highlights

- Knowledge Enhancement**
Improved understanding of global change research
- Networking**
Built connections with peers across the region
- Proposal Development**
Learned key skills for writing successful proposals
- Regional Cooperation**
Explored opportunities for collaborative research

PDTW 2023: Program Structure and Schedule

📅 May 22-24, 2023 | Bangkok, Thailand

👥 Role: Group Leader. Group 2 (Impact of Extreme Events in the Urban and Rural Context in Southeast Asia)

🎓 Achievement: Won the best proposal voted by peer and mentor on our proposal: Improving Knowledge System on The Impact of Urban Landuse, Land Cover and Local Cimate Conditions in Urban Heat Island: A Case Study of Three Mega Cities in Southeast Asia

Workshop Structure

🗣️ Training Components
Interactive sessions on proposal development

👥 Group Activities
Collaborative exercises

🤝 Mentorship
One-on-one guidance

📄 Resource Materials
Handouts & reference guides



APN-ECAP Networking Session, Field Trip and WATSAT Training Workshop 2023

APN-ECAP Program Overview



The official establishment of Early-Career Professional Network. Empower early career professionals, provide platform for collaboration, knowledge sharing and advocacy



When & Where

May 24 - 25, 2023, in Bangkok, Thailand, simultaneous with PDTW.



Target Audience

Early career professionals



Tour of AIT Laboratories



APN-ECAP Networking Session






Field Trip and Evening Networking Reception Dinner



WATSAT Training Workshop 2023

Workshop Overview

-  **What is WATSAT?**
Water Security Assessment Tool - a training workshop focused on improving knowledge systems, governance, and regional cooperation for water security.
-  **When & Where**
May 26, 2023, in Bangkok, Thailand, simultaneous with PDTW.
-  **Target Audience**
Early career professionals interested in water security research and implementation.



Workshop Highlights

Assessment Framework

Learned to assess water security challenges and opportunities in the Asia-Pacific region.

Regional Cooperation

Enhanced understanding of collaborative approaches to water governance.

Knowledge Systems

Developed skills in integrating traditional and scientific knowledge.

Practical Tools

Gained hands-on experience with water security assessment tools.

Complementary to PDTW

The WATSAT workshop built upon PDTW themes, providing practical tools for implementing water security initiatives in the region.

Key Learnings from PDTW

The Proposal Development Training Workshop (PDTW) in 2023 provided valuable insights and skills that laid the foundation for my successful CRRP grant application. Key learnings included:



Proposal Writing Techniques

- ✓ Strategic approach to proposal development
- ✓ Effective project design and planning
- ✓ Clear articulation of research objectives



Networking Opportunities

- ✓ Building connections with regional experts
- ✓ Collaborative partnerships for research
- ✓ Mentorship opportunities with experienced professionals



Understanding APN Priorities

- ✓ Knowledge systems enhancement
- ✓ Regional cooperation mechanisms

“ The PDTW provided me with the tools and knowledge to successfully develop my CRRP grant proposal on urban climate in the Asia-Pacific region. ”

From Workshop to Success: My CRRP Grant Application



PDTW Participation

May 2023



Knowledge Application

Transferring PDTW learnings



CRRP Grant Success

2024/2025

✔ How PDTW Knowledge Transformed into CRRP Success

- Applied framework knowledge from PDTW to design my research
- Incorporated regional cooperation strategies taught in PDTW
- Used knowledge systems approach to structure my proposal

🔑 Key Success Factors

- Leveraged networks developed during PDTW
- Applied governance frameworks learned in PDTW
- Incorporated feedback mechanisms from PDTW trainers

CRRP 2024/2025 Project Overview

Project Title: Assessing Urban Heat Islands in Southeast Asia Megacities: An Integrated Study of Land Use, Climate Change and Heatwave Occurrences
Project Period: 01/10/2024 – 30/09/2025

Objectives

- ✓ Enhanced understanding of UHI drivers, urban management implications using geospatial approach
- ✓ Development of an integrated system for UHI analysis – utilising geospatial analysis and climate modelling
- ✓ Strengthening adaptive capacity of local urban communities

Methodology

- 📊 Qualitative research approach
- 👥 Stakeholder engagement and collaboration
- 📍 Pilot Study: Kuala Lumpur

Expected Outcomes

- 📄 Policy briefs for urban sustainability
- 🤝 Enhanced cooperation between stakeholders
- 💡 Evidence-based recommendations for implementation

Core activities / Regional research
Project: CRRP2024-0821-Wan

Assessing urban heat islands in Southeast Asia Megacities: An integrated study of land use, climate change and heatwave occurrences



Photo by Shutterstock/Robert Adnan on Unsplash

Cities in Southeast Asia (SEA) face dual challenges from climate change and urban heat island (UHI) effects. Despite governmental efforts to mitigate UHI and promote sustainable urban development, significant policy gaps persist including the absence of UHI-specific regulations, insufficient integration of green infrastructure and low public awareness. This research aims to analyse UHI dynamics and their relationship with Land use land cover (LULC) and Local Climate Zone (LCZ) by taking Kuala Lumpur as the case study using an integrated system of remote sensing, geospatial analysis and climate modeling to establish a communication framework between science, policy and action in combating the UHI effects. Specifically, satellite data is utilized to analyze spatial and temporal UHI patterns, correlating with changes in LULC and LCZ. Machine learning classifier will generate LCZ maps and conduct an accuracy assessment. Statistical methods like regression and correlation analysis will explore the relationships between LULC, LCZ, and UHI. Additionally, the study adopts climate modeling incorporating the latest urban canopy model, for a comprehensive understanding of the urban thermal environment. By examining the interactions between climate dynamics, LCZ variations, and UHI drivers, this research will offer insights into effective urban management and contribute to the understanding of the urban thermal environment and its drivers for urban management in SEA.

Activity area's
Regional research

Grant DOI
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Project Collaborators

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CRRP 2024/2025 Project Outcome: Stakeholder Workshop and APN Regional Meeting and Future Direction



When & Where

August 26-27, 2025, in Bangi Resort Hotel, Bangi, Selangor, Malaysia



Stakeholders Involved:

Government Officials and Academics: Kuala Lumpur City Hall, Malaysia Meteorological Department, National Landskap Negara, Public Works Department, National Disaster Management Agency, Southeast Asia Disaster Prevention Research Initiative, PLANMalaysia, National Institute of Health
NGO: Greenpeace, Urbanice Malaysia
Media: Media Prima



Future Direction:

Continuation plans (publication, scaling up to new regions, Policy engagement)




Acknowledgment:


APN, Mentors, collaborators and IPI, UKM




Challenges and Solutions


Challenges


 **Complex Application Process**
Navigating the PDTW and CRRP application requirements was initially overwhelming


 **Regional Collaboration**
Establishing effective partnerships across different countries and institutions

 **Resource Limitations**
Managing project activities with limited funding and human resources

Solutions

 **PDTW Training**
Leveraging knowledge from PDTW to improve proposal quality and project design

 **Strong Partnerships**
Building collaborative networks with researchers and institutions across the Asia-Pacific region

 **Structured Approach**
Breaking down project goals into manageable tasks with clear timelines and milestones

Advice for Future Applicants

Based on my experience as a successful CRRP grant recipient and PDTW participant, here are my key recommendations:



Start Early

Begin preparing your proposal well in advance. Use PDTW as an opportunity to refine your ideas and build a strong foundation.



Build Networks

PDTW is not just about learning; it's also about building connections. Collaborate with other researchers in your region.



Be Clear and Concise

Ensure your proposal has clear objectives and a well-defined scope. Focus on the main issue, knowledge systems, and governance.



Seek Mentorship

Find mentors who can guide you through the application process. Their experience can be invaluable.

“Don't be discouraged by rejections. Use feedback to improve your proposal and try again. Persistence and adaptation are key.”

THANK YOU

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