

# Resilient Urban Centres and Surrounds (RUCaS)

## MISSION SUMMARY REPORT – LAO PDR (13–17 MAY 2024)

### Background

RUCaS aims to improve the value generated by investment in urban infrastructure by better integrating conventional large ‘grey’ infrastructure (e.g. levee banks, pipelines, treatment plants, roads, railways) with nature-based solutions (e.g. wetlands, mangroves, catchment protection, green walls, multifunctional parks and transport corridors). RUCaS program outputs include case studies demonstrating application in different urban contexts and scales, as well as training in the tools and principles applied, and strategies to upscale nature-based solutions (NbS).

### Purpose

Michael Simon, Katharine Cross, Dr Ha Le Song and Nalinthone Vilaysane from RUCaS led the mission, which included visits to Vientiane and Luang Prabang. In both locations, they were accompanied by Mekong Australian Partnership officials from the Australian Embassy in Bangkok: First Secretary Mr Shayne McKenna and Senior Program Officer Dr Rutmanee Ongsakul. In Vientiane, the Bangkok based Development Counsellor, Mr John Francis also joined the field visit to urban marshlands.

The mission had the following objectives:

- Confirm the RUCaS case study areas and approaches in Vientiane with Global Green Growth Institute, and update Luang Prabang focus with implementing NGO GRET, community wetland committee and local government officials. Confirm the RUCaS activities for each case study and deepen relationships with key stakeholders at each case study site.
- Advance preparations for the Lao PDR Knowledge Exchange in August 2024.
- Advance the Urban Wetlands and Stream Guideline and Research roadmap and relations with the UN Environment Programme (UNEP), the Ministry of Natural Resources and Environment (MONRE) and the National University of Laos (NUOL).
- Advance wider relations with other stakeholders including MONRE and Department of Climate Change Adaptation, DFAT at the Australian Embassy in Laos, the UN Development Programme (UNDP), the World Wide Fund for Nature (WWF) and Gender Development Association (GDA.)

### Activities

#### Vientiane

The RUCaS team acknowledges the partnership and support of the Green Global Growth Institute (GGGI) to coordinate the visit and align the RUCaS and NATURA projects in Vientiane.

- **Briefing on the NATURA project** – We attended a detailed briefing to understand the status of GGGI’s NATURA project (Nature-Based Solutions for Urban Adaptation), supported by the New Zealand Ministry of Foreign Affairs and Trade, and look at governance and program alignment with RUCaS. We discussed project beneficiaries (local households and communities in and around the marsh and the wider catchment) and the importance of the upcoming

Environmental and Social Inclusion Assessment (ESIA), including options for how RUCaS will engage.

**Field visit to Nong Loup lan marsh in the west of Vientiane city** – We met with representatives from the Vientiane Capital Department of Planning and Investment, and village chiefs from NongDa, Nonkheelek, and Tadthong– the communities surrounding the marsh – to understand issues and their vision for the area. The site tour:

- improved our understanding about how the marsh and infrastructure function
- included looking at inlet and outlet areas, and flood vulnerability points within the marsh and surrounding villages.
- included a visit to Nongping marsh, and meeting with village officers and chief.

These activities helped define and consolidate the RUCaS case study in Vientiane.

- GGGI clarified with stakeholders the focus of the NATURA program is to:
  - support vulnerable communities to be more flood resilient in the face of climate change and growing pressures from urban development
  - support communities and government with NbS options that advance Vientiane as a green city, and provide support to increase the marsh’s value for local communities through productive, recreational and environmental uses.
  - Support Lao government with capacity building around NbS and their integration/mainstreaming into urban planning.
- RUCaS will support GGGI objectives in the Nong Loup lan marsh by:
  - exploring options for using a mosaic wetland approach consistent with our work with NUOL, MONRE and UNEP in developing a good practice guideline for implementation of actions to protect and enhance urban streams and wetlands
  - presenting NbS options that provide multiple ecosystem services – economic, environmental and social outcomes - considering specific support for vulnerable and low income households as well as the wider community.
  - Support the development of a methodology to calculate direct and indirect beneficiaries considering not only the spatial dimension but also the temporal one (beneficiaries’ matrix/tensor).

## Luang Prabang

The RUCaS team acknowledges the partnership and support of GRET to coordinate the visit and engagement with local counterparts and stakeholders, and align the RUCaS and [WISE](#) projects in Luang Prabang.

- **Meeting with government officials** – We met with officials from the Luang Prabang Urban Services Office, the World Heritage Office and the Department of Public Works and Transport, to understand the current status and plans for the Ban Mano pond area and catchment.
- **Site visit to Ban Mano Wetlands** – We joined GRET staff to review the Ban Mano pond area and catchment. We examined recent interventions and test sites for treatment wetlands (designed to intercept and clean greywater from local restaurants and houses before it enters the wetland and drainage system) and test sites for wetland plants, developed with research students from Soupavanh University collaboration. We explored the downstream and upstream catchments, and reviewed different ponds and their status of care and upkeep. We explored how different NbS typologies could work in different sites through the catchment.

- **Meeting with local community representatives** – We were honoured to present to a meeting of local village leaders, the Ban Mano Wetland Committee and local householders on NbS typologies. We explored what these solutions could achieve, and which ones were of most interest based on existing challenges and opportunities. While more work will be needed to explain the technologies and their appropriate placement, there was strong interest in:
  - worm filters combined with planter boxes and/or treatment wetlands used to treat grey water before it enters the canals and wetland ponds
  - fish farming and floating gardens to support the productive use of ponds
  - water regulation pits to reduce flooding and help with temporary detention of flood peaks, protecting homes, gardens and ponds.

Working with GRET, we also engaged with government and World Heritage counterparts, and the community wetland committee, in discussing the opportunity to apply sensors and monitoring programs into NbS interventions. With support of DFAT, Monash University will bring sensors into the RUCaS program to help monitor performance and impacts, and help communicate what the NbS typologies are, how they are performing and what is happening as a result. The approach will be to work with a local university and complement planned water monitoring that GRET and partners are organising for Pond 70.

### Other meetings

- As part of the ‘Establishing a Knowledge Hub and Building Capacity on Urban Ecosystem-based Adaptation’ with UNEP, MONRE and NUOL, we were pleased to meet with the Faculty of Forestry Vice Dean, Prof Chittana Phompila and his team (Metmany Soukhavang - Project Coordinator for Knowledge Hub, Faculty of Forestry; Phetlasy Souladeth– Head of Research Division, Faculty of Forestry) at the NUOL Faculty of Forestry campus. Katharine Cross and Nalinthone Vilaysan presented a project update for the research roadmap, and shared developments in the guideline. We discussed the importance of seeking alignment across several complementary programs within the UN system working on advancing ecosystem-based systems and adaptation. Next steps include:
  - Urban and wetland and stream guidelines – The focal point (Dr Duangta) will provide Lao examples and information into each of the sections. The aim is to have a ‘zero draft’ of the guideline completed and circulated for comment and consultation by August 2024
  - Research roadmap – Future research includes factors around wetland and stream ecosystem health such as catchment hydrology, sediment quality, in stream hydraulics and geomorphology. However, past work done through programs such as the Challenge Program for Water and Food program and IWMI would need to be reviewed and recommendations provided to build on this. Dr. Chittana is the focal point.
- We met with our MONRE DCCA counterparts to discuss the RUCaS and UNEP projects, and look forward to the planning for the next Knowledge Exchange later in the year.
- We met First Secretary James Morschel from the Australian Embassy Laos, updating him on current work and relationships with stakeholders, and upcoming schedules.
- We met with WWF to exchange information on initiatives around NbS and wetlands in Laos, and across the Mekong sub-region. This meeting was a chance to engage with DFAT and country director Mr Loris Palentini
- Our GEDSI lead Michael Simon met with the Director of Gender and Development Association, Ms Manivanh Suyavong, to plan a collaborative seminar as part of the upcoming Women and Rivers Congress, to be held in Chiang Rai Thailand (4–6 June 2024). WSCA is leading development of a session on guidance to incorporate GEDSI into NbS. This guidance will collate learnings on good practice from expert organisations across the region.





*Reviewing wetland ponds with GRET, Luang Prabang*



*Visiting Nong Loup Ian Marsh with GGGI, local village chiefs and DFAT*



*Meeting with GRET and Luang Prabang officials and World Heritage Office*



*Presenting RUCaS NbS concepts to the Ban Mano Wetland Committee meeting*



*The Nong Loup Ian Marsh, Vientiane, focus of RUCaS case study and GGGI's NATURA program*

## Social media posts from the mission

- <https://www.linkedin.com/feed/update/urn:li:activity:7196366194092765184>
- <https://www.linkedin.com/feed/update/urn:li:activity:7196366189105741824>
- <https://www.linkedin.com/feed/update/urn:li:activity:7198110192989818880>
- <https://www.linkedin.com/feed/update/urn:li:activity:7197045672041172992>
- <https://www.linkedin.com/feed/update/urn:li:activity:7195931757735518208>

## Next steps in Lao PDR

The next steps are summarised below:

Action	Timing
Lao PDR Knowledge Exchange Meeting, Vientiane	27–28 August 2024
RUCaS Regional Conference	March 2025

