

Journey through sustainability:

Celebrating 20 years of
SUMERNET (2005–2025)

20 stories of change

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Contents

Foreword	1
Preface	2
Introduction	3
Acknowledgements	4
Twenty stories of change	5
1. Reducing flood risks for local communities along the Cambodia-Vietnam border	7
2. How urbanization impacts the hinterlands	8
3. Green tourism pathways: Promoting climate-friendly urban tourism in Hue and Chiang Mai	10
4. Understanding payment for environmental services in Vietnam	12
5. Directing benefits to the rural poor in contract farming	14
6. Gender and climate risks in the deltas of the Mekong Region	16
7. Providing insights for better forest conservation: Engaging with REDD+ policymakers in Cambodia, Myanmar and Thailand	18
8. Chindwin futures: Setting up a river basin organisation	20
9. Co-producing knowledge to build resilience and recover regional wetlands	22
10. SUMERNET Young Professionals (SYP)	24
11. Mekong Thought Leadership and Think Tanks Network (MTT)	26
12. Lancang-mekong climate smart and youth leadership initiative	28
13. Media-research collaboration fellowships	30
14. Groundwater Integrated Regional Assessment (GIRA)	32
15. Participatory flood risk management in Ban Phai	34
16. Equitable water sharing in Vietnam's hydropower hotspots	36
17. Listening to voices on the margins: Lessons from the COVID-19 crisis for improving access to clean water for drinking and hygiene in the Mekong Region	38
18. Co-creating women's leadership in river governance (Mekong curriculum)	40
19. SUMERNET PLUS	42
20. Building a community for change: Twenty years of strengthening research, policy and practice in the Mekong Region	44
Resources	47
The Mekong Region	48

Foreword

It is an honour to write this Foreword as Acting Chair of the SUMERNET Steering Committee as we celebrate twenty years of the Sustainable Mekong Research Network (SUMERNET). This milestone holds special meaning for me because my own professional journey has grown alongside SUMERNET.

I joined the network in 2013 during SUMERNET Phase III as a Principal Investigator, leading a regional research project on forest governance and REDD+ across Cambodia, Myanmar and Thailand. At the time, I saw SUMERNET as a platform for regional research. Over the years, I came to realize it is much more than that. It is a community of researchers, policymakers and practitioners united by a shared commitment to generating knowledge that informs policy, strengthens institutions and improves people's lives. It is thus both humbling and deeply meaningful to now write this Foreword as Acting Chair of the Steering Committee.

The twenty stories in this booklet show that SUMERNET's greatest achievement is not simply the research it has supported, but the regional community it has built. By bringing together researchers, governments, civil society, local communities and development partners, SUMERNET has demonstrated that the Mekong Region's complex environmental and development challenges are best addressed through collaboration, trust and shared learning.

These stories illustrate how research has influenced public policy, strengthened institutions, improved natural resource governance, supported vulnerable communities, and nurtured a new generation of regional leaders. They remind us that knowledge has the greatest impact when it is co-produced with those who use it, ensuring that research is both scientifically credible and relevant to policy and practice.

This anniversary also provides an opportunity to express our heartfelt appreciation to the many people and institutions that have made this journey possible. On behalf of the Steering Committee, I would first like to thank the Swedish International Development Cooperation Agency (Sida) for its long-standing partnership, trust and generous support over the past twenty years. Sida's sustained investment has enabled SUMERNET to grow into one of the Mekong Region's leading knowledge networks.

We also extend our deepest appreciation to the Stockholm Environment Institute (SEI) for serving as SUMERNET's Secretariat and host throughout this remarkable journey. Through its outstanding leadership, professional management and unwavering commitment to regional ownership, SEI has provided far more than institutional support. It has built a trusted platform where collaboration across countries, disciplines and sectors has flourished. The strength and reputation that SUMERNET enjoys today are a testament to SEI's dedication and stewardship.

Finally, I would like to express my sincere appreciation to my fellow Steering Committee members, member organisations and the wider SUMERNET network, whose leadership, expertise and dedication have been central to the network's success over the past two decades. I also thank the hundreds of researchers, universities, government agencies, civil society organisations, local communities and development partners whose commitment and collaboration have shaped the stories presented in this booklet. SUMERNET has always been a collective endeavour, and its achievements reflect the contributions of everyone who has helped build, strengthen and sustain this network.

As SUMERNET embarks on its next chapter through SUMERNET PLUS, we do so with confidence built on twenty years of partnership, trust and shared learning. I hope this booklet not only celebrates what has been achieved but also inspires the next generation to continue working together towards a more resilient, inclusive and sustainable Mekong Region.

Dr. Pheakkdey Nguon
Acting Chair
SUMERNET Steering Committee

Preface

Journey through sustainability: Celebrating 20 years of SUMERNET (2005–2025)

Looking back over the past twenty years fills me with gratitude and excitement. It is truly inspiring to see how a network that began in 2005 with a shared vision has presently grown into a vibrant community of researchers, policymakers, practitioners, civil society organizations, young professionals, local communities, and development partners working together for a more sustainable and resilient Mekong Region.

SUMERNET has never been just about research. It has always been about people. It is about bringing together diverse knowledge, experiences, and perspectives to better understand the challenges facing our shared home, the Mekong. And it is about transforming that knowledge into practical solutions, informed policies, and meaningful actions that improve lives.

The twenty stories presented in this booklet are more than just project success stories. They are stories of trust built across borders, partnerships strengthened over time, young researchers nurtured into future leaders, communities whose voices shaped better decisions, and policymakers who embraced evidence to create positive change. Together, they show what can be achieved when we work collectively across countries, disciplines, and sectors with a common purpose.

As I read these stories, I am reminded that the true impact of SUMERNET cannot be measured simply by the number of projects, publications, memberships, or policy dialogues alone. Its greatest achievement lies in the relationships we have built, the capacities we have strengthened, and the confidence we have created among people to work together for the common future of the region. These stories are therefore not only about the past but also a foundation for what lies ahead.

This milestone would never have been possible without the dedication and commitment of so many people over the last two decades. I would like to express my heartfelt appreciation to our network members across the Mekong Region, the SUMERNET Steering Committee for its visionary regional leadership, and the Stockholm Environment Institute (SEI), which has hosted and supported the Secretariat throughout this journey. I am grateful to our research partners, government agencies, policymakers, civil society organizations, development partners, local communities, and all stakeholders whose knowledge, collaboration, and commitment have made these stories of change possible. My sincere thanks go to the Swedish International Development Cooperation Agency (Sida) for their long-standing trust and generous support, which has enabled SUMERNET to grow into a truly regional, locally owned network.

As SUMERNET begins its next chapter through SUMERNET PLUS, I hope this booklet serves not only as a celebration of what we have achieved together, but also as an invitation to continue this journey. The challenges facing the region are becoming increasingly complex, but so too is the strength of our network. Together, we will continue to co-produce knowledge, strengthen research-to-policy engagement, communicate and raise public awareness, and work alongside communities and decision-makers to build a more inclusive, resilient, and sustainable future for our Mekong; for our home, and for generations to come.

Dr. Chayanis Krittasudthacheewa
Director, SUMERNET Programme
Deputy Director, SEI Asia Centre

Introduction

A shared ethos of science and collaboration

I first met Dr. Doung Van Ni in 2017, during a SUMERNET field trip to Cambodia. He was standing shoulders-deep in a lake, covered in mud, extracting soil samples for a project that would reshape perceptions about how wetlands are understood and managed across Cambodia and Vietnam.

In the Mekong Region, governments tend to view wetlands as marginal or barren lands to be dug up, drained and used for agriculture. Dr. Ni's team wanted to change this perception using scientific analysis.

Through years of field work, community dialogues, policy-level meetings, maps, and reports, they built a powerful case for the ecological and human value of these landscapes including fish and bird diversity and local livelihoods. This enabled a better understanding of wetland ecosystems and their human-biodiversity interconnection² for policymakers to manage and preserve the wetlands.³

They presented their findings on fish and bird diversity, and the livelihoods that depend on them, to local and national officials at both the Ministry of the Environment and the Ministry of Agriculture in Cambodia and Vietnam. This enabled policymakers to see wetlands not as obstacles to development, but as vital ecosystems where human well-being and biodiversity are deeply intertwined.

The wetlands project is just one of dozens of projects that SUMERNET has supported in the last 20 years. Together, these initiatives have been building a **regional community of knowledge in the Mekong Region** that uses robust scientific research to influence policy, protect natural ecosystems, and emphasize the voices, well-being and livelihoods of the local communities that depend on these ecosystems the most.

My encounter with Dr. Ni, immersed in the middle of a lake and committed to his work, captured for me the shared ethos of SUMERNET: collaborative, grounded scientific research to provide real-world solutions.

Stories of change

This booklet brings together 20 stories of impact, partnerships, research and policy engagement, involving SUMERNET partners over the last twenty years.

In November 2025, to celebrate twenty years of its work, SUMERNET organized a photo exhibition during the Mekong Environmental Resilience Week. Through powerful visual storytelling, the exhibition celebrated two decades of contributions to sustainable development and research-to-policy engagement across the region.

The exhibition selected and highlighted “20 stories of change” featuring the work of SUMERNET partners from across the region in the last two decades. The exhibition offered a visual journey of these projects, but the real impact of the network lies in the experiences of the people behind them. At the exhibition, several partners were invited to share their work and experiences with SUMERNET, reflecting the many milestones that have defined their journey with SUMERNET. This booklet presents these 20 stories of change.

As SUMERNET continues its work, this booklet of twenty stories shows the deep collaboration and unwavering commitment to change in the ground that remains the key pillars of SUMERNET in the Mekong Region.

Rajesh Daniel
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¹ <https://youtu.be/Y7u4aAw12dg?si=Flp-gnnhEqxqGbM7&t=390>

² <https://www.sumernet.org/story/analyzing-human-use-and-natural-resources-in-wetlands-of-cambodia-and-vietnam>
<https://www.sumernet.org/story/studying-wetland-ecosystems-in-cambodia-and-vietnam>

³ <https://www.youtube.com/watch?v=-0wu9U78dR4&t=15s> The video shows the local national park officials meeting with the research team

Acknowledgements

SUMERNET Secretariat would like to convey our highest appreciation for the work of the research partners and network members in the Mekong Region and their significant contribution over these last twenty years to this booklet of change stories. We are grateful to the many colleagues (listed below) who contributed the engaging stories of success and impact featured in this booklet.

The publication of this booklet would not be possible without the contribution and support of Dr. Chayanis Krittasudthacheewa, SUMERNET Programme Director, and Nhan Vo, SUMERNET Programme Manager. We also thank Phuthita Dokphut, SUMERNET fellow for her work in researching the stories.

We gratefully acknowledge the Swedish Government through the Swedish International Development Cooperation Agency (Sida) for their long-term financial support to SUMERNET over the past 20 years.

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September 2026

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Twenty stories of change

01

Reducing flood risks for local communities along the Cambodia-Vietnam border



Introduction

The Lower Mekong Basin is considered prone to flood hazards both due to the Mekong River ecosystem with its ebbs and flows and, increasingly in the recent past, by climate variability. In general, about 4 million hectares in Cambodia and 2.7 million hectares in Vietnam frequently experience flooding that can be especially severe during the rainy season. Thousands of villages, especially in the more remote areas along the Cambodia-Vietnam border, suffer the extreme hardships caused by floods damaging their homes and often washing away people, crops, and livestock.



Assessing livelihood vulnerability

Towards providing solutions to the risk of flood, this SUMERNET research project assessed the “livelihoods vulnerability” of local communities in two provinces in the border areas beginning in early 2010. Assessing Livelihoods Vulnerability (ALV) is a measuring tool which involves a combination of Participatory Rural Appraisal (PRA), household surveys, and the use of a Sustainable Livelihood Framework (SLF) to construct the Livelihood Vulnerability Index (LVI). It provides users with a means to understand and to overcome their environmental constraints.

The approach examines five livelihood assets: natural, human, physical, social, and financial capital. The Livelihood Vulnerability Index helps to estimate the different impacts caused by floods on these assets. Five years of project work resulted in this approach being used as a tool to assess the sources of livelihoods vulnerability and improve understanding of conditions in the flood-prone provinces along the Cambodia-Vietnam border. The approach showed that vulnerability to flooding of households differed among the different social groups, with the poor households bearing the brunt of the suffering caused by floods. On the basis of these findings, the study could also propose some measures to cope with the floods. These include adjusting the cropping system and patterns, preparing an effective early warning system, planning and providing aid relief, putting in place a flood management and mitigation program, using mobile phones for flood information, and building needed infrastructure. The empirical findings of the livelihood study provided a better understanding of the local livelihoods and coping strategies and helped provide recommendations on how to strengthen them.



Cross-border use of the livelihoods-based approach

A key feature of the project was the participatory method using a livelihoods-based approach that was cross-border, collaborative, and built capacity. This study brought together a community of scientists and local people across two neighbouring countries to solve and share a common problem of flooding and then to use their knowledge for taking measures to adapt to floods. The project has developed training courses on how to use the assessing livelihoods vulnerability tool in practice at the case study site in An Giang in Vietnam. Later, the tool was expanded for use in many provinces in Cambodia and Vietnam. Over the last five years, the project has conducted trainings for local partners, including local officials and farmers, on how to use the LVI.



Benefiting farmers, younger researchers, and local partners

Since the project began in 2011 with SUMERNET support, we have published five papers of which 900 copies were disseminated to local partners and farmers in the local language. Four students, including three from Cambodia and one from Vietnam, have benefited from training on the Assessing Livelihoods Vulnerability and Livelihood Vulnerability Index. At present, over ten students who joined the initial trainings have completed either their bachelor's or master's degrees. The project team has also written a range of policy briefings, articles, and book chapters to provide a better understanding of the ALV and its uses for assessing local livelihoods in flood-prone areas for the wider public.



Key changes at local and institutional levels

The dissemination of the research findings and the ALV trainings have directly improved people's livelihoods and helped reduce flood damages in the provinces along the Cambodia-Vietnam border. The project partners have used their skills to bring about institutional change. For example, Vietnam's Department of Agricultural and Rural Development secured their own funding to start training courses for their officers on how to use LVI and to apply it in practice in their field sites. Similarly, Cambodia has set up a course for local partners to introduce LVI in the border areas. The project has also had a major influence on the provincial Flood Control Programme among communities in Vietnam and Cambodia. In Vietnam, the research findings were accepted by the local authority and were integrated in the local planning for flood control and livelihoods improvement at the community level.



02

How urbanization impacts the hinterlands



Introduction

This research project studied the perceived impacts of urbanization in two urban centers, one in Thailand and the other in Lao PDR. The project also studied the responses of local communities and households to the urbanization process and its impacts, and attempted to formulate policy options to enhance a more balanced and sustainable urbanization. Concerns about rapid urbanization are not centered only in the city but extend their impacts to the peri-urban and urban hinterlands, as rural and urban economies and social lives are becoming increasingly intertwined.



Urbanization in the Mekong Region

Urbanization is defined as a massive growth of, and migration to, cities that yields both positive and negative consequences. In the Mekong Region, urban areas are growing at rates of 4.9 percent in Lao PDR, 4.3 percent in Cambodia, 3.6 percent in Vietnam, and 2 percent in Thailand. These rates are approximately 2.5 times the national population growth averages. At present, 31 percent of the population in the Mekong Region lives in urban areas, a figure expected to exceed 50 percent by 2050 as urbanization continues.



Urban hinterlands

Urban hinterlands are defined as the landscape interface between town and country, or the transition zone where urban and rural uses interact and often clash. Alternatively, it can be viewed as a landscape type in its own right, forged from an interaction of urban and rural land uses. The documented negative impacts of urbanization on rural hinterlands include changes in ecological balance, loss of agricultural land, land speculation, changes in farming practices, and pollution. However, urbanization also brings positive impacts such as greater income and job opportunities, as well as better access to education, health care, and other services. These impacts are expected to increase, particularly in the hinterlands of small and medium-sized cities.



Professional impacts from our study

A key positive impact of the research was enhancing academic research and imparting knowledge to the younger generation. The team completed comparative cross-country research, published two papers in international journals indexed in ISI and Scopus, one book chapter, and presented two papers at international conferences. Additionally, the team translated the research monograph into Thai and Lao languages, disseminating 700 copies to libraries, government offices, and non-governmental groups. A community in Laos even awarded the team a certificate of honor, and the National University of Laos (NUOL) thanked the team for being the first foreign researchers to share their results and success with the university. Since the project's completion, team members have advanced in their professions, with two completing PhDs and others attaining leadership roles in geography and social development departments. The research team leader received a prominent research award and was awarded an associate professorship in 2015.



Passing on our knowledge to the next generation

A key positive impact of the research was enhancing academic research and imparting knowledge to the younger generation. The team completed comparative cross-country research, published two papers in international journals indexed in ISI and Scopus, one book chapter, and presented two papers at international conferences. Additionally, the team translated the research monograph into Thai and Lao languages, disseminating 700 copies to libraries, government offices, and non-governmental groups. A community in Laos even awarded the team a certificate of honor, and the National University of Laos (NUOL) thanked the team for being the first foreign researchers to share their results and success with the university. Since the project's completion, team members have advanced in their professions, with two completing PhDs and others attaining leadership roles in geography and social development departments. The research team leader received a prominent research award and was awarded an associate professorship in 2015.

Green tourism pathways: Promoting climate-friendly urban tourism in Hue and Chiang Mai



Introduction: Sustainable urban tourism in Chiang Mai, north Thailand

This research explored strategies for low carbon emissions in urban tourism through case studies in Hue city, Vietnam, and Chiang Mai municipality, Thailand, both of which are major urban centers in the Mekong Region with growing hospitality sectors. The project provided technical support by using a carbon accounting tool called Bilan Carbone to measure greenhouse gas (GHG) emissions within the urban tourism sector. Initial findings from the Chiang Mai Municipality (CMM) showed that the transportation sector contributes significantly to these emissions. Stakeholders identified Non-Motorized Transport (NMT) as an option to reduce transport emissions while simultaneously promoting income-generating opportunities for the poor. Overall, the project aimed to foster action plans and policies for climate-compatible urban tourism development and create green jobs in both cities.



Non-motorized transport (NMT) in Chiang Mai

In 2011, Chiang Mai's hospitality sector emitted over 4.2 million tons of carbon dioxide equivalent, with transportation identified as the largest source. The research focused on reducing GHGs within city limits and provided scientific data to help policymakers improve the “Non-Motorized Transport” system. Through consultations with local authorities, business associations, and communities, the city made a firm commitment to expanding NMT infrastructure. While motorization has traditionally pushed walking and cycling aside, the study highlighted that 70% of car trips cover less than 5 kilometers, meaning NMT has massive potential to replace car travel. Promoting walking and cycling directly leads to lower carbon emissions and increased public transport use, while also delivering co-benefits like reduced noise, lower pollution, and better public health.



Key changes achieved: The NMT campaign and green tourism

The NMT initiative addressed traffic congestion and air pollution while fostering long-term tourism development. Consequently, Chiang Mai launched an “NMT campaign” to increase biking areas and improve the connectivity of footpaths and bike routes throughout major urban zones. The research team worked closely with the municipality to launch the NMT policy under the “Sustainable Urban Transport in Chiang Mai Project,” which received support from the World Bank's Global Environment Facility. A demonstration site was established at “The Three Kings Monument” in the heart of the city to provide technical support on sustainable land use. It is expected that these non-motorized options will reduce annual carbon emissions by 230 to 570 tons, with the goal of increasing inner-city biking areas from 4% to 10%. The project has also catalyzed other greening approaches in the business sector, such as the “Energy Efficiency Initiative for Hotels” launched in 2015 and various public bike-sharing initiatives.



04

Understanding payment for environmental services in Vietnam



Introduction

Increased economic development and growing demand for energy and timber resources are putting significant pressure on the forest areas of Vietnam. As part of its approach to forest conservation, the Government of Vietnam initiated a “payment for forest environmental services” (PFES) policy in 2010. Under this scheme, “users” such as hydropower or water companies make payments to “suppliers,” which include communities living in upland forested areas. This system was initially piloted between 2009 and 2010 in the Lam Dong and Son La provinces, involving various hydropower plants, water supply companies, and ecotourism businesses. Recognizing the need to understand how this works in practice, SUMERNET initiated a research study involving forest households, policy implementers, and early-career researchers.



Key successes of the PFES study

The primary result of the study was helping to develop the legal framework for Vietnam’s national policy on PFES. The research helped policymakers understand institutional arrangements, revenue generation, and the necessity of gaining political commitment at all government levels and among local forest-dwelling people. Additionally, the study explored the potential for applying similar PFES schemes in Lao PDR and Cambodia. By providing technical advice and guidance notes, the team developed “model forest partnerships” and created linkages to other forest management networks.



Building wider understanding and influence on PFES

The research team presented project results in both national and international arenas, including presentations to local representatives of eight provinces in the Lower Delta areas of Vietnam. A major factor in the project's success was involving policy implementers from the beginning. For instance, Nguyen Dinh Tho, the director of the Lam Dong provincial PFES Fund, served as a researcher on the project. He played a crucial role in disseminating findings to the central government and other provinces that were scaling up PFES during final pilot workshops.



Key benefits for policymakers and researchers

There were three key levels of change resulting from the PFES study. At the professional level, the project enhanced research capacity and expanded collaboration among Cambodia, Lao PDR, and Vietnam. The Hue University Research Team significantly expanded its network to include various domestic and foreign universities. At the educational level, the project was integrated into the training curriculum for graduate and undergraduate students in Vietnam, serving as a practical case study for environmental economics and resource management. These findings helped students understand how market-based instruments can be implemented in practice.



Policy and personal impacts

At the policy level, the study helped close the gap between policymakers, implementers, and influencers by highlighting challenges in scaling up from the pilot stage. On a personal level, the lead researcher, who started as an early-career researcher in 2010, was later promoted to Associate Professor and Vice Rector in Hue University of Economics, Vietnam. This academic success was attributed to the experience, knowledge, and publications produced through the SUMERNET project.

05

Directing benefits to the rural poor in contract farming



Introduction

Increased regional integration and greater foreign investment have resulted in rapid economic growth for the countries of the Mekong Region over the last few decades. While this growth has created new opportunities, it also presents challenges for farmers, the majority of whom remain small land holders. Commercially-oriented agriculture, particularly through contract farming, is playing a critical role in rural livelihoods as large firms begin using contract farmers for crops like rice and sugarcane that were formerly for subsistence. Despite its growing influence, there has been limited information on whether this system truly benefits small-scale and poor farmers.

Our study

The research project, titled “Making economic integration work for the rural poor through contract farming practices in the GMS,” was conducted between 2011 and 2012. The research team included members from Cambodia, Lao PDR, Myanmar, and Thailand, who collaborated with Australian volunteer researchers. The study aimed to identify the current status of contract farming, its positive and negative impacts on rural households, and how the system could be made more beneficial for the poor. The team focused on two specific commercial crops for detailed analysis: rice in Cambodia and Myanmar, and sugarcane in Lao PDR and Thailand.



Key findings and features of the study

The study found that contract farming in these four countries operates under a mix of centralized, nuclear estate, and multipartite models. Common practices include the provision of credits, agricultural inputs, and pre-season set prices. While farmers benefit from guaranteed prices and technical support, they must also bear significant production risks, such as crop loss from climate events, pest attacks, and labor shortages. Furthermore, the study revealed that large-scale farm owners typically receive more benefits because they can meet the high-volume quotas required by companies, whereas small landholders often have to work as sub-contractors to these larger quota holders.



Does contract farming benefit the small-scale farmer?

The research concluded that the current system does not directly benefit small-scale rural farmers but does provide an opportunity for them to share in profits if they negotiate with large contractees. To improve their standing, small-scale farmers can form production networks or agricultural cooperatives to supply produce as a group, making them more eligible to contract directly with companies with government support. This approach helps mitigate the risks for individual smallholders while allowing them to access credits, equipment, and markets.



Clear impacts and policy influence

This was the first research project of its kind to collect such extensive data across the four Mekong countries. At the institutional level, private firms in Myanmar and other regions began adopting friendlier contract farming practices and offering better extension services based on the project's findings. In Thailand, recommendations regarding the environmental impacts of heavy fertilizer and water use led authorities to initiate land and water conservation practices among farmer groups. The study successfully produced a set of policy recommendations to improve the sustainability of contract farming across the region.



Challenges and lessons learned

The project was challenging because it required dealing with complex regional mega-enterprises and international NGOs. The team observed that contract systems vary significantly by country; for example, the Lao system relies on a tripartite agreement involving the government, while the Thai system relies primarily on free-market mechanisms. Despite these differences, farmlands in all four countries face similar risks, including climate uncertainty, soil degradation, and high transportation costs. The collaboration enabled by SUMERNET allowed researchers to manage these cross-country differences and successfully complete a regional research project that provided a voice for the rural poor.

06

Gender and climate risks in the deltas of the Mekong Region



Introduction

The impacts of climate change on low-lying delta areas in the Mekong Region are already severe, with floods, droughts, storms, and threats to water supplies representing a significant set of risks. This research project aimed to identify effective ways to improve and share diverse understandings of water-related climate change risks and uncertainties in selected delta communities in Vietnam, Thailand, and Cambodia. In particular, the study looked at gender and socio-economic class as important variables for understanding these climate risks.



Communicating climate risks by sharing local knowledge

The projected impacts of climate change on densely settled, low-lying coastal and delta areas make the Mekong Region one of the most vulnerable areas in the world. While technical knowledge of hydrological implications is growing, uncertainties remain high, and local residents often do not recognize how future risks may change. Decisions on adaptation will be made not only by local governments but also by households, community groups, and private enterprises. Therefore, an improved and shared understanding of changing hazards is essential to ensure effective collective and private adaptation responses. Better tools for communicating risk and sharing knowledge from different sources are necessary to provide a shared local platform for decision-making.



Key findings and features of the study

Local communities in disaster-prone areas often possess substantial experience and local knowledge regarding their vulnerabilities and how to adapt. However, understanding of additional risks arising specifically from climate change is usually very low among both residents and officials. This study helped share knowledge between communities and climate experts to improve the understanding of both the science of climate-related risks and the local capacities to respond in specific situations.



Gender and social equity

The study obtained a better understanding of gender and socio-economic status as critical variables for understanding climate risks. To ensure gender and social equity, the research pro-actively involved women and other potentially marginalized social groups in the process. A reasonable balance of women and men was sought for risk communications working groups and as key informants. Special attention was given to understanding gender-related differences in the perception of risk causes, actual levels of vulnerability, and the effectiveness of different communication modes for sharing knowledge.



Gender-sensitive climate policy

The findings of the study have contributed to climate action, disaster risk management plans, and mass communication efforts by local governments in Cambodia, Thailand, and Vietnam. A key achievement was enabling an understanding of how gender relations affect access to resources that are vital for reducing risks. These research findings were presented to administrators and policy-makers to enable them to become more gender-sensitive in their future plans and policies.

07

Providing insights for better forest conservation: Engaging with REDD+ policymakers in Cambodia, Myanmar and Thailand



Introduction

As countries in the Mekong Region experience increased economic development, forests have come under pressure from commercial logging, cash crop expansion, and infrastructure development, which negatively impacts forest-dependent communities. Since 2007, the United Nations Framework Convention on Climate Change (UNFCCC) has negotiated the REDD+ initiative to reduce emissions from deforestation and forest degradation while promoting conservation and sustainable management. Since 2014, this SUMERNET project has collected data on national REDD+ strategies in Cambodia, Myanmar, and Thailand to help policymakers overcome barriers and ensure effective, equitable implementation.



Working closely with both policymakers and non-government groups

The research team focused on generating “useful knowledge” that is salient, credible, and legitimate for stakeholders, particularly those drafting National REDD+ Strategies. The team worked with both government and non-government representatives, providing formal and informal inputs for technical working papers and policy documents. Researchers were invited to present their work at various national and local meetings, and the Myanmar team even published findings in the Department of Forestry’s newsletter.



Providing “useful knowledge” and engaging with key state partners

The primary partners for this project were REDD+ policymakers, though the study also engaged in academic discussions regarding market-based approaches and forest governance. A significant impact was that the findings were accepted and used by these organizations; for example, research results were published by Cambodia’s National REDD+ Taskforce Secretariat, which includes seven different ministries. Furthermore, a team member authored a technical paper on safeguards that was used to draft Cambodia’s national strategy, while partners in Thailand maintained frequent interaction with the lead author of Thailand’s National Safeguards Strategy.



Key changes: Benefiting the researchers themselves

The project facilitated internal growth for the researchers, helping them learn about different country contexts and better ways to engage with both policy and academia. Thai partners noted that the project structure enhanced their ability to conduct independent research and think critically during fieldwork. The collaborative nature of the work across three countries allowed younger researchers to better conceptualize their own research methods and revealed new entry points for engagement with various national institutions.



Impacts of our findings

At the academic level, the research has contributed to conversations regarding evidence-based decision-making in the Mekong region. The findings have proven valuable for these countries as they explore market-based approaches to mitigate climate change impacts through the forestry and land use sectors while improving links between knowledge and policy for sustainable management.

08

Chindwin futures: Setting up a river basin organisation



Introduction

In early 2013, the Stockholm Environment Institute (SEI) proposed the Ayeyarwady Futures (AF) program to engage with state and non-state actors in Myanmar and regional networks in the Mekong Region. AF supports Myanmar in moving toward sustainable development through evidence-based participatory planning for water resources in the Ayeyarwady River Basin. A key focus is the Chindwin River, the biggest tributary of the Ayeyarwady, which is currently facing pollution, erosion, sedimentation, and decreasing flows due to rapid economic development. Following scientific assessments and stakeholder consultations in 2014, partners recommended establishing a River Basin Organisation (RBO) to manage these challenges.



Establishing the Chindwin River Basin Organization (CRB)

The Chindwin Futures (CF) program is a long-term effort to build awareness of water governance tools and strengthen the capacity of state and civil society actors to engage in regional deliberations. Efforts to establish the Chindwin RBO are well underway with the close cooperation of the Sagaing Region's government authorities. The mission of the RBO is to address key environmental problems and manage the river system sustainably for future generations. Its primary goals include improving water resource management and river health through coordination across different sectors, building public awareness, and supporting integrated management of water allocation and quality.



Lessons learned: Designing institutional frameworks

Extensive consultations have provided several lessons for designing water governance frameworks. Data collection is essential, as a major constraint in the Chindwin Basin is the lack of reliable socio-economic and hydro-meteorological information. To address this, the team has utilized field interviews, satellite imagery, and hydraulic modeling. Setting robust strategies is crucial so that policies can function under uncertain conditions, such as the unpredictable impacts of climate change. Furthermore, wide participation from the business sector—particularly mining and transport—and local townships is vital for the RBO's success.



Introduction

Across the Mekong Region, a great diversity of wetlands and the agro-ecological farming they support are central to many rural communities' livelihoods and culture. Unfortunately, many areas have been degraded or lost due to large-scale infrastructure development, including irrigation and hydroelectricity projects. This project, supported by SUMERNET Phase 3, works to build partnerships between local communities, government agencies, civil society, and academics. Through joint participatory action research, the team aims to recover wetland agro-ecological systems affected by past development projects. The work is focused on three locations: the Rasi Salai and Hua Na irrigation areas in Thailand, the floating rice-vegetable systems in the Mekong Delta of Vietnam, and villages along the Xe Bang Fai River in Laos.



Participatory zoning of wetlands in Northeast Thailand

Ever since its completion in 1993, the Rasi Salai dam has caused conflict between local communities and the government agencies that operated it. Due to the dam, local people lost farmland, river resources, and wetlands vital for rice and fisheries. However, since the late 2000s, the conflict has thawed as participatory social impact assessments were produced and negotiations began on how lost livelihoods could be recovered. In this project, researchers from Ubon Ratchathani University have worked with community leaders, local authorities, and government officers to initiate a process for categorizing affected wetland areas. Joint-mapping undertaken in 2015 helped designate permitted uses for these zones, ranging from rice growing to forest conservation. Project partners were particularly pleased to participate in the joint field survey, an event that had never happened before given the area's history of conflict.



Conserving the benefits of floating rice in Vietnam

Floating rice, also known as deepwater rice, is native to the Mekong River Delta and holds significant cultural and ecological value. Since the mid-1970s, the area of production has been greatly reduced by the building of dykes and the introduction of high-yielding rice varieties. While this intensification increased food production, it also led to water scarcity, agro-chemical pollution, and reduced soil fertility. Researchers at An Giang University are now collaborating with farmers to document the value of agro-ecological systems that combine floating rice in the rainy season with vegetable production in the dry season. These values include safe food production, biodiversity maintenance, and improved soil quality. The project is also working with local companies to explore consumer demand for nutritious floating rice and is informing rice production policy in An Giang province.



Rediscovering organic rice production in Savannakhet Province

In Xaybouri district of Lao PDR, researchers from the Northern Agriculture and Forestry College have been working with farmers downstream of the Nam Theun 2 hydropower dam. Through meetings with farmers and local forestry offices, the project supported a transition to organic rice production in Phonethan and Dong Yang villages. Farmers believed this would offer higher market prices and healthier products to support community resilience. Between May and October 2015, farmers grew organic rice using local resources and low quantities of input. Beyond the successful harvest, one of the most significant changes identified was how the project helped build a constructive relationship between district government offices and the farmers.



Co-producing knowledge to build resilience in wetland ecosystems

Agro-ecological farming has long been practiced in the biodiverse wetlands of the Mekong region. The contemporary challenge for both policy and practice is finding ways to support these foundations for regional resilience. Experience so far has highlighted the benefits of a “co-production of knowledge” methodology, where the project team acts as a catalyst to bring boundary partners together to undertake research on shared problems. By working together from the start, the team has been able to co-design research projects that meet the shared expectations and goals of all partners involved.



Introduction

The Mekong Region is at a critical crossroads, facing an array of complex environmental challenges ranging from rapid urbanization to water insecurity and climate change. For decades, seasoned experts have driven the region's research and policy agendas. However, addressing the long-term sustainability of the Mekong River Basin requires the energy, innovative perspectives, and dedicated involvement of the next generation.

Historically, early-career researchers and young environmental practitioners in the region have often worked in their separate fields. Despite their passion, they frequently lacked the dedicated platforms necessary to share knowledge, access mentorship, and meaningfully influence policy. Recognizing that youth are the future of the region's ecosystems, there was a pressing need to bring them together.

How the project emerged

To address this gap, the SUMERNET Young Professionals (SYP) initiative was established through a grassroots, bottom-up approach. Originally initiated in 2021 as a youth network, the core team, composed of SUMERNET Fellows, began organizing virtual events to build capacity in areas like proposal writing and science communication.

In late 2022, the initiative evolved into its current form. A newly formed core team, incorporating members from all six Mekong countries (Cambodia, China, Lao PDR, Myanmar, Thailand, and Vietnam), rebranded the group to better reflect the early-to-mid-career status of its members. SYP's core mission became clear: to actively engage young professionals across the Mekong Region, foster continuous capacity development, and drive meaningful change in environmental research and policy.

Who this project benefits

SYP directly benefits young researchers, development practitioners, media professionals, and graduate students (typically aged 18-35) across the Mekong Region. By providing a regional platform, it empowers them to enhance their research capacities and collaborate across borders. Ultimately, the initiative benefits the broader Mekong society. By equipping young professionals with the tools to communicate effectively, local communities and policymakers gain access to fresh, evidence-based solutions for pressing water-energy-climate issues.

From isolated researchers to a connected regional force

The most significant change brought about by SYP is the transformation of young professionals from isolated individuals into a cohesive regional network. Before SYP, many early-career researchers struggled to find their footing in cross-border collaborations; today, they are actively leading them.

A prime example of this transition was SYP's "Water Security for All" photo story competition. Young researchers partnered with media professionals to capture the realities of freshwater abundance and shortage in the Mekong Delta, translating complex data into striking visual stories. These creative outputs successfully engaged the public and policymakers alike, proving that young professionals can effectively bridge the divide between scientific research and community awareness.

At the national level, SYP has successfully mobilized local youth to tackle localized threats. During recent SYP National Networking Events in Lao PDR and Myanmar, young researchers were brought directly to the table with established NGO leaders, civil society groups, and local stakeholders. In Lao PDR, these dialogues highlighted that innovative climate adaptation can be deeply rooted in local knowledge and community-led approaches. In Myanmar, the network provided a vital, collaborative space for youth to integrate environmental resilience into grassroots social work and urban climate adaptation.

By empowering these early-career individuals to design their own capacity-building workshops and lead regional dialogues, SYP has ensured that the next generation of Mekong leaders is not waiting for the future to make a difference—they are driving sustainable development today.



Introduction

The Mekong Region is undergoing rapid economic development, yet it remains profoundly vulnerable to the escalating threats of climate change, water scarcity, and shifting energy demands. Historically, infrastructure planning in the region treated water, energy, and climate as isolated sectors, often excluding the communities most affected by these shifts, such as indigenous populations, women, and people with disabilities. Securing the long-term sustainability of the Mekong River Basin requires policies that are not only grounded in rigorous scientific evidence but also driven by holistic, cross-sectoral thinking and social equity.

How the project emerged

Recognizing this urgent need, the Mekong Thought Leadership and Think Tanks Network (MTT) Program was launched. Supported by the Australian Government, the program empowers knowledge-based policy influence organizations (KBPIOs) to enhance their effectiveness and inclusiveness in policy engagement. Operating through a robust partnership of 25 organizations across the region, the program funds comprehensive studies and responsive projects. By employing transdisciplinary approaches that link the Water-Energy-Climate (WEC) nexus, the MTT Program moves beyond traditional research to generate practical, equitable solutions for persistent and emerging regional challenges.

Who this project benefits

The MTT Program fosters a diverse ecosystem of beneficiaries. At the institutional level, it strengthens think tanks and research organizations across Cambodia, Lao PDR, Thailand, and Vietnam. At the professional level, the program invests in the next generation of leaders through the MTT Fellowships, providing capacity building and mentorship for entry- and mid-level professionals, alongside Media Fellowships that connect complex academia to public awareness. Ultimately, the core beneficiaries are marginalized communities on the ground. By mandating a Gender Equality, Disability, and Social Inclusion (GEDSI) lens across all its projects, the program ensures that the rights and insights of vulnerable groups directly inform local and national policymaking.

Stories of change

The program's impact is visible across the region, where rigorous technical research is actively transforming community resilience and policy. For instance, in Vietnam's Mekong Delta, the design and operation of water and energy infrastructures historically lacked gender sensitivities, resulting in systems that exacerbated vulnerabilities for women. Through the GS4Infra rapid response project, researchers are collaborating directly with local Women's Unions to revise engineering and design guidelines. This ensures that future infrastructure is both technically sound and gender-responsive, proving to policymakers that inclusive planning creates more resilient communities.

Addressing complex transboundary challenges, the Project SAGA flagship study unites experts from Cambodia and Vietnam to manage the shared Mekong River Delta Aquifer. Faced with climate-induced water scarcity, the initiative develops solar-powered groundwater treatment systems while integrating indigenous knowledge to guide communities toward climate-resilient agriculture. By elevating the voices of women and marginalized groups who are typically underrepresented in water governance, the project is shaping inclusive, long-term water supply strategies for both nations.

In Lao PDR, marginalized communities rely heavily on aquatic biodiversity, but climate variability and hydropower development severely threaten local fisheries. The Enhancing Fisheries Resilience project combines scientific modeling with grassroots knowledge to establish critical conservation zones and introduce community-based aquaculture. By formulating conservation policies from the bottom up, the project helps restore river ecosystems while sustaining local livelihoods and stimulating local economic growth.

To ensure these vital technical findings reach beyond the academic sphere, the MTT Program pairs researchers with Media Fellows. By embedding journalists directly into field research, the program translates complex WEC data into compelling, evidence-based narratives. This essential science communication drives public awareness and fosters informed policy dialogues, ensuring that the pressing challenges of Mekong communities are met with actionable, sustainable solutions.

12

The Lancang-Mekong climate smart and youth leadership initiative



Introduction

The Lancang-Mekong River is more than just a waterway. It is the lifeblood of six nations, supporting the livelihoods, cultures, and economies of millions of people. However, this vital transboundary basin is currently facing unprecedented challenges from climate change, unpredictable weather patterns, rapid infrastructure development, and complex water governance issues. While government officials and senior experts have long debated the future of the river, the youth have historically been put to the sidelines. To secure the sustainable development of the Lancang-Mekong region, there is an urgent need to elevate young people from mere participants to central decision-makers in water and climate governance.

How the project emerged

Recognizing this critical gap, the initiative to build a Water Sector Youth Leadership Network and promote Climate-Smart Water Technologies in the Lancang-Mekong Region was launched. Driven by the Mekong-Lancang Cooperation (MLC) framework and supported by the LMC Special Fund, the project represents a major shift from political rhetoric to tangible action. It was brought to life through a collaborative effort involving Thailand's Office of the National Water Resources, the Environmental Research Institute at Chulalongkorn University, the Stockholm Environment Institute (SEI) Asia Centre, and the Lancang-Mekong Water Resources Cooperation Center. By organizing intensive regional consultation workshops in places like Chiang Rai and Ayutthaya, the project set out to create a dedicated space where youth could collaborate, share knowledge, and draft a concrete action plan for regional water sector leadership.

Who this project benefits

This initiative fosters a vibrant ecosystem of beneficiaries across Cambodia, China, Lao PDR, Myanmar, Thailand, and Vietnam. At its core, it empowers young water professionals, early-career researchers, and youth leaders by providing them with the skills, networks, and platforms needed to engage meaningfully in transboundary water cooperation. Furthermore, the project directly benefits grassroots practitioners, particularly small-scale farmers, by connecting them with youth-driven, climate-smart agricultural technologies and innovations. Ultimately, the broader Lancang-Mekong society benefits, as policymakers gain access to the fresh, unbiased perspectives of a generation dedicated to inclusive, sustainable, and climate-resilient water management.

Stories of change

The most profound impact of the initiative has been the transformation of young professionals from isolated individuals into a cohesive, transboundary force. When youth representatives from the six riparian countries gathered at the regional workshops, they actively broke down deep-rooted cultural and linguistic barriers. Together, they redefined the Lancang-Mekong basin simply as their “HOME”—standing for Harmony, Openness, Motivation, and Ecology. This shared identity helped them realize that despite their different nationalities, their destinies are inextricably linked by the exact same river.

This newfound unity was further solidified through immersive learning experiences on the ground. During field visits to local knowledge hubs like the Mekong School in northern Thailand, young leaders interacted directly with seasoned community defenders and local wisdom keepers. These grassroots advocates instilled a powerful message: young people possess the unique ability to bridge cultural divides without political agendas, giving them the power to effect real change. Empowered by these interactions, the youth participants recognized that they do not have to wait for the future to lead, but have the right and the responsibility to demand that policymakers listen to them today.

Perhaps the most significant structural change brought about by the project is the transition from fragmented youth activities to institutionalized leadership. For the first time, young leaders from the six nations have co-designed a comprehensive five-year action plan and a joint statement for the MLC Joint Working Group on water resources. They are no longer just learning about water governance in theory, but they are actively promoting climate-smart technologies to local farmers and securing a permanent seat at the transboundary decision-making table. By embracing mutual respect and continuous collaboration, these young professionals are proving that the next generation is ready to safeguard the Lancang-Mekong River and ensure a climate-resilient future for everyone.



Introduction

The Mekong Region is grappling with immense environmental challenges, from severe water scarcity and unpredictable weather to the disruptive impacts of rapid hydropower development. While scientists and think tanks generate crucial data on these issues, this rigorous research often remains locked away in academic journals or policy briefs. When complex environmental data fails to reach the public or policymakers in an accessible way, urgent climate action stalls. To truly protect the Mekong's ecosystems and the people who depend on them, there is a profound need to translate hard science into compelling, human-centered narratives that can inspire real-world change.

How the project emerged

To bridge this divide between science and society, the Mekong Thought Leadership and Think Tanks Network (MTT) Program launched the Media-Research Collaboration Fellowships in January 2025. Coordinated by the Stockholm Environment Institute (SEI) Asia and supported by the Australian Government, the initiative awarded six fellowships to journalists and multimedia producers across the region. Rather than having media makers work in isolation, the program paired them directly with MTT-affiliated researchers. This created a powerful two-way exchange: journalists gained access to cutting-edge environmental data, while researchers received hands-on training from the media grantees in multimedia storytelling and public engagement.

Who this project benefits

This initiative fosters a mutually beneficial ecosystem for professionals and communities alike. Directly, it empowers environmental journalists and early-career researchers by breaking down professional silos and equipping them with cross-disciplinary skills. Ultimately, however, the core beneficiaries are indigenous groups, rural farmers, and women—the marginalized populations of the Mekong Region, whose daily struggles and resilience are amplified on regional platforms. By bringing these grassroots realities to light, the project also benefits policymakers and the general public, providing them with clear, evidence-based reporting to guide sustainable development decisions.

From complex data to human-centered narratives

The impact of this collaboration is evident in the diverse, on-the-ground stories that have emerged across the region, turning technical environmental concepts into relatable human experiences. In Cambodia, journalist Eung Sea tackled the issue of groundwater contamination and water scarcity. By reporting on a new solar-powered groundwater treatment system in Siem Reap, he illustrated how innovative, renewable technology can provide safe drinking water to remote communities without relying on expensive fossil fuels. He also highlighted how multi-stakeholder approaches are essential for helping indigenous communities in Stung Treng adapt to climate disasters.

In Laos, the reporting made the science of climate adaptation accessible and deeply local. Journalist Keoxomphou Sakdavong documented how rice farmers in Savannakhet are utilizing Ecosystem-based Adaptation to survive erratic weather. She beautifully captured the farmers' transition from skepticism to action as they adopted “Alternate Wetting and Drying,” a technique that monitors underground water to reduce methane emissions, allowing farmers to save water and earn money through a new carbon credit scheme. Meanwhile, Patithin Phetmeuangphuan showcased the power of local unity in Luang Prabang, where villagers established a fish conservation zone on the Xuang River to protect dwindling aquatic life while adopting alternative livelihoods like bamboo processing.

The fellowships also brought crucial social equity issues to the forefront in Vietnam and Thailand. Journalists Pham Nguyen Tuan An and Nguyen Thi Anh Thu spotlighted Women's Union leaders in the Mekong Delta who are moving beyond being seen as “vulnerable groups” to actively pioneering community adaptations against saline intrusion. At the same time, Kieu Mai investigated the darker side of energy transition, exposing how small hydropower projects in Vietnam often leave downstream ethnic minorities grappling with droughts and eroded riverbanks. In Thailand, filmmaker Theerayut Weerakham captured the visual beauty and ecological importance of these waterways in his documentary “Our River,” giving audiences a firsthand look at the interconnected ecosystems of the lower Songkhram River. Through these collaborative stories, the MTT Program ensures that the science of the Mekong is finally speaking the language of its people.



Introduction

In the Lower Mekong River Basin, groundwater is an invisible but vital lifeline, providing water for approximately 60 million people. It plays a crucial role in water security, poverty reduction, and supporting natural river flows during the harsh dry seasons. However, this precious resource is under severe threat from rapid urbanization, population growth, and the unpredictable impacts of climate change. Across the region, an absence of robust groundwater policies and fragmented governance has led to unregulated drilling, plummeting water tables, and dangerous contamination. This unsustainable exploitation inevitably sparks conflicts among different sectors and disproportionately harms vulnerable populations, including the rural poor, marginalized groups, and ethnic minorities, who depend on reliable access to water for their daily survival.

How the project emerged

To address this escalating crisis, the Groundwater Integrated Regional Assessment (GIRA) project, specifically titled “Strengthening groundwater governance in rapidly urbanizing areas of the Lower Mekong Region,” was launched under the SUMERNET 4 All initiative. Led by researchers from the Asian Institute of Technology (AIT), the project zeroes in on four rapidly expanding urban centers where groundwater is the primary water source: Khon Kaen in Thailand, Siem Reap in Cambodia, Luang Prabang/Vientiane in Lao PDR, and Ba Ria-Vung Tau/Can Tho in Vietnam. By employing an integrated, multidisciplinary approach, the project evaluates the current state of regional groundwater governance. It maps out socio-physical complexities, reviews legal frameworks, and identifies ways to strengthen policies based on concrete evidence of water availability, current usage, and potential future conflicts.

Who this project benefits

The GIRA project fosters a diverse ecosystem of beneficiaries across the Mekong Region. At the grassroots level, it champions the rights of marginalized, poor, and ethnic communities by explicitly analyzing whether national policies frame groundwater access as a fundamental human right. At the institutional level, it provides critical data and capacity-building support to technical experts, local authorities, and municipal water departments who have historically lacked the human and technical resources to map and monitor aquifers effectively. Furthermore, it engages the private sector, including tourism operators and commercial water bottling businesses, guiding them toward responsible consumption and demand-side water management.

Stories of change

The project has already begun transforming how nations approach their hidden water reserves, turning rigorous assessment into actionable policy. In Cambodia, the study revealed a significant lag in institutional frameworks, highlighting that groundwater management was chaotically scattered across as many as ten different government departments. Rather than just pointing out the flaw, the project catalyzed real-world action. Through SUMERNET’s rapid response fund, AIT and SEI Asia are now directly supporting Cambodia’s Department of Water Supply and Sanitation (DWSS) to develop a unified, indicative groundwater management plan and to build the much-needed technical capacity of its staff.

Beyond institutional restructuring, the project has successfully bridged the gap between top-down regulation and bottom-up community participation. In Siem Reap, GIRA workshops created an unprecedented platform where government authorities, civil society organizations, local community representatives, and major private water consumers—like the hotel and bottling industries—sat at the same table to discuss their shared challenges. Together, they are shifting the narrative from unfettered extraction to shared responsibility, exploring sustainable solutions like managed aquifer recharge and the reuse of greywater to ensure the Mekong’s underground lifeline survives for generations to come.

15

Participatory flood risk management in Ban Phai



Introduction

In August 2019, Tropical Storm Podul tore through the northeastern region of Thailand, unleashing catastrophic flash floods that devastated Ban Phai District in Khon Kaen Province. With floodwaters rising up to six meters in some urban areas, the disaster caused an estimated 8 billion baht (250 million USD) in damages to agriculture, local businesses, and personal property. The hardest hit were those living in densely packed waterfront communities—the urban poor, women, the elderly, and people with disabilities. In the painful aftermath, it became clear that the tragedy was not solely an act of nature. Uncoordinated government regulations, poor city planning that blocked natural historical waterways with new infrastructure, and a severe lack of early warning systems had trapped both the water and the people. To prevent history from repeating itself, Ban Phai desperately needed a radical shift from reactive, top-down disaster response to proactive, inclusive planning.

How the project emerged

Following post-flood evaluations by the Ban Phai district governor, the provincial disaster prevention office, and local community leaders, researchers recognized that a unified, community-centric approach was the only viable path forward. Supported by the Sustainable Mekong Research Network (SUMERNET), the “Participatory Flood Risk Management: A Case for Policy Implication from the Ban Phai Municipality” (PFRM-Ban Phai) project was launched. Instead of academics and government officials drafting recovery plans behind closed doors, this initiative brought researchers, local policymakers, and the residents of the five most severely affected communities directly to the same table. The primary goal was to use Ban Phai as a model site for co-learning and co-producing a flood risk management plan that truly understood and addressed the complex, overlapping realities on the ground.

Who this project benefits

The PFRM-Ban Phai project directly benefits the vulnerable waterfront populations of communities such as Moo 1 Pattana, Pai Kao, Mitrpab Soi 4, San Jao, and Sumana Mai. By actively bringing women’s groups and community leaders into the core planning process, the project ensures that those who suffer the most during environmental crises have a direct, powerful say in their own survival and recovery. At the institutional level, the project greatly benefits local government agencies and the Ban Phai Municipality by providing them with a scientifically backed, community-supported blueprint. This collaborative framework helps align previously uncoordinated disaster laws and overlapping agency jurisdictions into a single, highly effective resilience strategy.

Stories of change

The most profound shift in Ban Phai has been the transformation of its residents from passive victims of a natural disaster into active architects of their city’s future resilience. Through a dedicated series of workshops, household surveys, and knowledge exchanges, the community and researchers co-created a comprehensive participatory flood risk map. This was not merely a technical document drawn up in a laboratory; it was a practical lifesaver built on local wisdom that clearly identified neighborhood vulnerabilities and mapped out genuinely safe evacuation zones for future emergencies. For the first time, government agencies truly valued and integrated the firsthand insights of the local population into their operational frameworks.

This collaborative, two-way communication led to immediate and concrete policy action. Ban Phai Municipality officially integrated these community-based preparedness and early warning measures into its long-term flood management policy and city planning. A multi-stakeholder approach ensured that these plans reflected the ground realities and needs of the local population rather than bureaucratic assumptions. The impact of this inclusive shift has been monumental. What started as a desperate local recovery effort has evolved into a celebrated national best-practice model for other towns and cities across Thailand.

Because of this evidence-based, participatory approach, Ban Phai Municipality has garnered numerous national accolades for smart governance, well-being, and disaster management. Even more remarkably, this successful model attracted approximately 1.5 billion baht in funding from Thailand’s central government. These crucial funds are now being deployed to sustainably manage future floods by incorporating nature-based solutions and creating alternative, resilient livelihoods for the city’s most vulnerable residents. Through shared knowledge and mutual respect, Ban Phai has proven that the best defense against climate disasters is a united, empowered community.



Introduction

Ethnic minority communities in Vietnam's mountainous areas depend heavily on irrigated agriculture for their survival, but their traditional way of life is increasingly threatened by water competition from upstream small hydropower plants. With over 600 small hydroelectric projects currently operating in Vietnam, these developments significantly strain the rivers, directly impacting the daily lives of millions of ethnic minorities. In Nghe An Province, for example, the villages of Tam Thai Commune sit downstream of the Xoong Con hydropower plant. Here, the local ethnic people suffer a devastating cycle: intense flood damage during the rainy season, followed by severe droughts during the dry season caused by abrupt dam closures. This unpredictable water flow has forced many families to abandon their arable land entirely. Balancing national energy development with the survival of these vulnerable communities requires a profound shift in how river water is managed.

How the project emerged

To address this growing crisis, the SHARE-WREM project was launched as a rapid response initiative to ensure harmonious development both locally and nationally. Led by researchers from the Nghe An Centre for Forestry Development and Consultation and Vinh University, the project moves beyond simply documenting environmental damage. Instead, it aims to provide concrete, evidence-based data on how small hydropower projects impact agricultural livelihoods, using this information to bridge the divide between different stakeholders. The ultimate goal is to develop a practical action plan for equitable water resource sharing through direct collaboration among the affected communities, hydropower businesses, and state officials.

Who this project benefits

The primary beneficiaries of the project are the ethnic minority communities in Tuong Duong District, who are fighting for equitable access to the water resources they rely on. By thoroughly integrating a Gender Equality, Disability, and Social Inclusion (GEDSI) perspective into its work, the project ensures that the voices of the most marginalized groups dictate the terms of local water sharing. Furthermore, local governments and hydropower operators benefit from clear, community-approved guidelines that help them manage disaster response and avoid ongoing conflicts. The insights generated here are designed to be shared with other hydroelectric areas across Nghe An Province and the rest of Vietnam.

Stories of change

Historically, the communities living downstream of these dams have suffered due to conflicts arising from rigid, top-down decision-making regarding hydropower operations. Decisions about when to release or hold back water were made without consulting the people whose crops depended on it. The SHARE-WREM project is actively shifting this power dynamic. Researchers are gathering critical data through household surveys, expert consultations, and focus group discussions to fully capture the everyday realities and concerns of the villagers.

Using this grassroots evidence, the community is now working alongside industry leaders and government authorities to draft formal benefit-sharing regulations. Instead of being passive victims of infrastructure development, these ethnic minority communities are helping to propose regulations that ensure hydropower disaster response plans are responsible, informed, and protective of human and environmental health. By fostering this unprecedented collaboration, the project is actively enhancing the policy frameworks needed for equitable water distribution, ensuring that Vietnam's push for energy does not wash away the sustainable livelihoods of its most vulnerable people.

Listening to voices on the margins: Lessons from the COVID-19 crisis for improving access to clean water for drinking and hygiene in the Mekong Region



Introduction

The COVID-19 pandemic served as a stark reminder that safe, reliable access to clean water is a fundamental first line of defense against global health crises. In the Mekong Region, frequent handwashing and proper hygiene became critical for survival. Yet, for marginalized populations—such as residents of informal urban settlements, remote ethnic minority villages, and migrant worker camps—the pandemic compounded existing struggles with severe water insecurity. Lockdowns and control measures disrupted water deliveries, economic hardships made purchasing clean drinking water difficult, and dry-season droughts further depleted local supplies. To build long-term resilience against future disruptive crises, such as climate-related disasters, it became crucial to understand and address the unique water and hygiene challenges faced by the region's most vulnerable communities.

How the project emerged

To capture these overlooked experiences, the “Listening to voices on the margins: Lessons from the COVID-19 crisis for improving access to clean water for drinking and hygiene in the Mekong Region” (VOICES) project was launched. Supported by the Sustainable Mekong Research Network (SUMERNET), the initiative was led by the Unit for Social and Environmental Research (USER) at Chiang Mai University, Thailand. It brought together a diverse coalition of partners, including the University of Yangon in Myanmar, the National University of Lao PDR, the Inland Fisheries Research and Development Institute in Cambodia, and the Western Highlands Agriculture and Forestry Science Institute in Vietnam. Rather than relying solely on top-down expert opinions, the project engaged directly with over 1,500 individuals across these five nations to listen to their on-the-ground stories and compare their lived realities with current water governance policies.

Who this project benefits

The VOICES project primarily benefits the most water-insecure and marginalized populations across the Mekong Region. By documenting their daily struggles—from lack of water rights and remote geographic isolation to the prohibitive costs of clean water—the project elevates their needs to local and national policymakers. Furthermore, the project places a strong emphasis on benefiting women. Because women are typically responsible for collecting, managing, and sharing household water, the research highlights how integrating an intersectional gender-sensitive approach is vital for designing equitable water, sanitation, and hygiene (WASH) programs.

Stories of change

By actively listening to those on the margins, the VOICES project has shifted the narrative from broad pandemic responses to targeted, community-specific solutions. The extensive surveys revealed unexpected challenges: in places like Chiang Mai, Thailand, economic downturns meant vulnerable families had less money to buy the bottled drinking water they heavily relied upon, with some reporting their supply had become less reliable or worse in quality than before the pandemic. In Myanmar, the crisis exacerbated already precarious conditions where communities relied on untreated surface water, heightening the risk of water-borne illnesses.

Bringing these localized issues to light has spurred actionable insights. The research demonstrated that domestic water insecurity and crisis control measures are deeply intertwined, proving that emergency planning must proactively assist those at highest risk. The project significantly highlighted the gender dimensions of water access, showing that women not only bear the burden of water collection but also lead in adopting good hygiene practices, such as proper handwashing.

These evidence-based insights are influencing practices on the ground. For instance, reflecting the need for localized water security, the Vietnamese government invested in building deep wells specifically for upland, marginalized communities to secure their household water consumption. Ultimately, the VOICES project advocates for a vital policy shift: decentralizing water access and investing in local infrastructure. By removing the underlying inequalities tied to location, costs, and rights, the region can ensure that when the next crisis strikes, no community is left dry.

Co-creating women's leadership in river governance (Mekong curriculum)



Introduction

In the Mekong Region, rivers and wetland ecosystems are lifelines for millions, but they are increasingly threatened by large-scale development projects, climate change, and recent crises like the COVID-19 pandemic and political instability. The burden of these impacts falls disproportionately on local communities, particularly on women who rely heavily on river resources to ensure their families' food security and survival. Despite their critical role as primary caregivers and resource managers, women's ideas and insights in water management are often sidelined by a highly masculinized governance system, leaving their knowledge invalidated. To build true environmental and economic resilience, there is an urgent need to bridge this inequality by ensuring that the voices of women are not just heard, but placed at the center of decision-making.

How the project emerged

To challenge this male-dominated status quo, the “Co-creating Knowledge to Enhance Women’s Leadership for Inclusive River Governance and Livelihood Resilience in the Mekong Region” (CKEWL) project was launched. Supported by a Rapid Research Grant from the Stockholm Environment Institute (SEI) and SUMERNET, this initiative was driven by a dedicated, all-women team of researchers. Bringing together partners like the International WaterCentre Alumni Network (IWCAN), the University of New South Wales, Ubon Ratchathani University’s Mekong Sub-region Social Research Center, and the Mong Pan Youth Association, the project sought to bridge the gap between traditional local wisdom and empirical science. Rather than imposing external solutions, the team worked directly with communities in Myanmar (Inlay Lake) and Thailand (Isan) to co-develop a locally appropriate “Mekong curriculum” that placed women’s knowledge at the forefront.

Who this project benefits

The CKEWL project directly benefits women and marginalized groups in the riverine communities of Thailand and Myanmar, whose livelihoods depend entirely on local waterways. By validating their traditional knowledge and integrating it into formal educational and policy frameworks, the project empowers these women to take on leadership roles in local water governance. Furthermore, the initiative benefits civil society organizations (CSOs), local researchers, and policymakers by providing a practical framework for inclusive, non-discriminatory knowledge production. Ultimately, entire communities benefit when river management strategies are culturally grounded, gender-inclusive, and resilient to external shocks.

Stories of change

The most transformative impact of the CKEWL project has been the deliberate shift of power back into the hands of local communities. Through the co-creation process, women and men worked together to build the Mekong curriculum, focusing on essential local livelihoods such as cotton weaving, fishing, and bamboo harvesting—sectors where water management had historically excluded women’s input. In places like the Tamui community-based school in Thailand, this curriculum became a vital space for locals to share knowledge about their deep relationship with the river, fostering inclusive resource development and breaking down gender barriers.

The project’s flexible agenda allowed communities to take the lead in identifying their own research questions and shaping their shared future. In Myanmar, despite severe travel restrictions due to the COVID-19 pandemic and political turmoil, the initiative adapted by utilizing open-source digital solutions. Women were able to connect, share stories, and mobilize through technology, proving that even in the face of immense adversity, knowledge co-creation can strengthen relations and resilience. By validating the expertise of women and moving beyond traditional, top-down water management, the CKEWL project has proven that when communities co-produce knowledge, they hold the power to reshape their own destinies and secure their rivers for the future.



Introduction

The Mekong Region faces existential threats from climate change and unsustainable development practices across its vital ecosystems. Addressing these pressing environmental challenges requires collaboration that crosses both national borders and disciplinary silos. For the past two decades, the Sustainable Mekong Research Network (SUMERNET) has worked to connect researchers, policymakers, and communities to tackle these transboundary issues. Following the conclusion of its previous phase, which focused heavily on reducing water insecurity, the region still requires urgent action to build long-term socio-ecological resilience. To ensure the survival and prosperity of the Mekong, future climate resilience solutions must be deeply rooted in social inclusion, equitable development, and a strict respect for human rights.

How the project emerged

Building on twenty years of transboundary cooperation, a new phase known as SUMERNET PLUS was launched to run from July 2025 to December 2027. Supported by a 23.35 million SEK commitment from the Swedish Government, this initiative represents a major step toward creating a long-term, climate-resilient Mekong through just and sustainable transitions. Covering Cambodia, China, Lao PDR, Myanmar, Thailand, and Vietnam, the program was explicitly designed to improve regional policies and practices through scientifically robust, policy-relevant research. The initiative targets critical thematic areas, including climate change adaptation, the water-energy-food nexus, agricultural systems, and the vital empowerment of women and youth in climate action.

Who this project benefits

SUMERNET PLUS fosters a diverse and inclusive ecosystem of beneficiaries across all six Mekong countries. At the institutional level, it builds the capacity of knowledge producers, policy influencers, and young professionals to deliver credible, solution-oriented research. By working closely with the private sector, the program also encourages the adoption of sustainable and equitable business practices. Most importantly, the core beneficiaries are local communities, Indigenous peoples, and marginalized groups. By embedding a human rights-based approach and focusing on gender equality, disability, and social inclusion, the program ensures that the specific needs of women and vulnerable populations directly shape climate resilience policies.

Stories of change

While SUMERNET PLUS is a newly launched phase, its structured approach is already setting the stage for transformative regional impacts. The program is actively distributing 19 distinct grants. By integrating scoping study and rapid response grants, the network ensures that its financial and intellectual resources are precisely targeted to regional policy demands and local realities. Furthermore, early-career professionals are directly supported through dedicated fellowship grants, ensuring the next generation of climate leaders is fully equipped to drive sustainable change. Beyond providing funding, the network acts as a powerful amplifier for grassroots advocacy. Through targeted policy dialogues, SUMERNET PLUS elevates local and Indigenous voices to major regional platforms, such as the Mekong River Commission, the Lancang-Mekong Cooperation, and ASEAN. By deliberately co-producing knowledge alongside the people most affected by environmental degradation, the project guarantees that climate solutions are not just technically sound, but socially just. Ultimately, SUMERNET PLUS is proving that a climate-resilient Mekong can only be achieved when evidence-based science is paired with inclusive, equitable community empowerment.

Building a community for change: Twenty years of strengthening research, policy and practice in the Mekong Region



More than twenty stories

As you turn the final pages of this booklet, one message becomes clear: meaningful and lasting change is never created by a single project, a single organization, or a single individual. It is created through long-term partnerships, shared learning, mutual trust, and a collective commitment to improving lives and protecting the natural resources that sustain the Mekong Region.

Over the past twenty years, the stories in this booklet illustrate many pathways to change. They show communities becoming more resilient to floods, researchers working across national borders, policymakers using scientific evidence to inform decisions, young professionals emerging as future leaders, and partnerships growing stronger through collaboration. Each story is unique, yet together they tell a much larger one: the story of a regional community that believes knowledge can create positive change when it is generated collectively for action.

This is, perhaps, SUMERNET's greatest achievement.

Building trust across borders

When SUMERNET was established in 2005, opportunities for researchers and practitioners from across the Mekong Region to collaborate closely on shared environmental and development challenges were still relatively limited. The issues facing the region, including water security, climate change, biodiversity loss, sustainable livelihoods, and environmental governance across borders, were connected, yet efforts to address them remained fragmented.

Over two decades, SUMERNET has grown from a research network into a trusted regional knowledge community. Today, it brings together more than 900 members from over 400 organizations, including researchers, universities, government agencies, civil society organizations, think tanks, media professionals, youth networks, and development partners. Guided by its Steering Committee and supported by the Secretariat hosted at SEI Asia, the network has remained regionally owned while continuously adapting to the changing needs of the Mekong Region.

This journey has shown that trust cannot be built within the lifetime of a single project. It grows gradually through openness, respect, shared experiences, and a willingness to learn from one another. These trusted relationships have enabled researchers and policymakers from different countries to work together on sensitive, complex issues, creating space for dialogue where collaboration might otherwise be difficult.

The power of knowledge co-production

One lesson has consistently emerged throughout SUMERNET's journey: knowledge creates greater value when it is co-produced.

The stories in this booklet show that research becomes more relevant and more influential when developed together with the people who understand local realities and those who make decisions. Communities contribute local knowledge and lived experience. Researchers bring scientific evidence and analytical approaches. Policymakers help ensure that findings inform planning and decision-making. Civil society organizations, media, and practitioners help communicate, apply, and scale knowledge for wider benefits.

By bringing these different perspectives together, SUMERNET has helped bridge research, policy and practice across the Mekong Region. This collaborative approach has contributed to improved local planning, stronger disaster risk management, better ecosystem governance, enhanced transboundary dialogue, and greater recognition of the voices of women, youth, and socially vulnerable groups in sustainable development processes. Rather than promoting research for its own sake, SUMERNET has sought to ensure that knowledge contributes to practical solutions that respond to local needs while addressing regional challenges.

SUMERNET's lasting legacy

SUMERNET's most enduring impact cannot be measured simply by the number of projects completed, publications produced, or policy dialogues organized. Its true legacy lies in the people, institutions, and partnerships that continue creating positive change long after individual projects end.

Researchers who joined as early-career scientists now lead research institutes, advise governments, mentor younger colleagues, and initiate new regional collaborations. Many partnerships established through SUMERNET continue well beyond project funding, generating new ideas, mobilizing new resources, and expanding collaboration across countries and disciplines. New initiatives such as the SUMERNET Young Professionals (SYP) and the Mekong Thought Leadership and Think Tanks Network (MTT), have further strengthened the regional knowledge ecosystem by empowering the next generation of leaders and deepening research-to-policy engagement.

Over time, SUMERNET has become more than a network. It has become a community of practice, built on a shared belief that collaboration creates greater value than working alone. It is this community that continues to generate new ideas, nurture future leaders, and strengthen evidence-based decision-making throughout the region.

Our journey continues

As SUMERNET enters its next chapter through SUMERNET PLUS, we carry forward not only twenty years of experience, but also the values that have guided the network since its beginning: collaboration, regional ownership, scientific excellence, inclusiveness, and a commitment to improving policy and practice through credible knowledge.

The twenty stories in this booklet celebrate achievements from the past, but they are equally stories of hope for the future.

Together they remind us that while projects may come to an end, relationships continue, knowledge grows, and communities become stronger. By working together across countries, sectors and generations, we can help build a more resilient, inclusive and sustainable Mekong Region, our shared home for generations to come.

Resources

SUMERNET 20th Anniversary Online Photo Exhibition

Journey Through Sustainability



sn20thanniversary.my.canva.site



Video resources

bit.ly/4fZESGf



Podcast

sumernet.podbean.com



Flyers



Flyer

SUMERNET PLUS:
Partnership for a long-term
climate-resilient Mekong through
just and sustainable transitions
bit.ly/4wffzsgv



Flyer

SUMERNET young
professionals
bit.ly/4h8rjVs



Story

Journey through
sustainability: Celebrating
20 years of SUMERNET
(2005-2025)
bit.ly/4yvPfJ6



Booklet

Stories of change from
the Mekong Region
(2005-2015)
bit.ly/4h04nsE



Brochure

Mekong Thought Leadership and
Think Tanks Network (MTT)
bit.ly/4z21COv



Factsheet

Promoting climate-smart water technologies
and innovations for sustainable water resources
and rice production under climate change in the
Lancang-Mekong Region
bit.ly/4hnh2Xn



Factsheet

Building water sector youth
leadership network in the
Lancang-Mekong Region
(LMC Youth)
bit.ly/4hLTD10



The Mekong Region



