World Wetlands Day February 2, 2025

> Dr. Deependra Joshi Chief Technical Advisor IWRM-EbA Project UNDP Laos, Vientiane, Lao PDR



## Securing wetland future for water and life

February 2, 2025, is celebrated as the World Wetlands Day with the theme *"Protecting Wetlands for our Common Future."* 

Wetlands are highly productive ecosystems and are vital for human survival. They are among the world's most productive environments and the world's most threatened natural habitats; cradles of biological diversity that provide the water and productivity upon which countless local communities and species of plants and animals depend for survival. They are home to several species of flora and fauna and play an important role in plant and animal diversity.

Wetlands provide numerous goods and services, not only to the local people living around them but also to communities living outside wetland areas. However, wetlands have become vulnerable to over-exploitation due to increasing population. Not only the mountains but the Mekong River basin's ecosystem has also undergone tremendous anthropogenic pressure which has accelerated the loss of soil, biodiversity and farmland productivity, thereby pushing further most of the population into the degraded environment and poverty trap.

Lao PDR's wetlands and water resources are unique assets, integral to the country's economic and development potential, rural and urban livelihoods, cultural values and diverse biological diversity. Lao PDR signed the Ramsar Convention in September 2010 by designating Greater Xe Champhone Wetland of Savannakhet Province and Beung Kiat Ngong Wetland of Champasak Province in the Ramsar List. The Government of Lao PDR has made significant progress in implementing the commitment of the Ramsar Convention. The government's decree on wetlands published in 2024 provides a set of directives on the conservation and sustainable use of wetlands through protection, maintaining the balance of ecosystem, water quality treatment, flood and drought mitigation, carbon absorption, climate change adaptation thus contributing to the sustainable development goals.

However, the situation of wetlands in Lao PDR is compounded by rapid climate change, frequent and severe disasters and rapid socio-economic growth, which has led to increased infrastructure development and increased land use. This has led to changes in the functions of wetlands, land use without systematic land use planning in wetlands, and a trend of increasing land clearing for production, and lack of detailed and clear designation of wetland reserves. This has resulted in changes in the quantity and quality of wetland management thus affecting the sustainable and wise use of wetlands.

Lao's "Vision to 2040 and the National Strategy for the Management and Utilization of Water and Water Resources to 2030" focuses on a comprehensive approach to manage the country's water resources, prioritizing sustainable development, integrated water resource management, and climate change adaptation, with a key goal of achieving equitable access to clean water for all citizens by 2040. It strives to promote livelihoods of communities as well as contribute to socio-economic and environmental development in a green and sustainable manner.

Moreover, Lao PDR's commitment to wetland conservation is further exemplified by the endorsement of the Ramsar Management Plans (Xe Champhone and Beung Kiat Ngong 2021-2025). These plans have been formulated for planned conservation, maintenance and development of the two Ramsar sites while providing support to economic, social and cultural development of local communities by improving their living conditions through sustainable and wise use of these wetlands.

## The flip side

Lao PDR hosts great wetland diversity. However, despite being important for both ecosystem conditions and human well-being, wetlands are being lost faster than any other ecosystem. This continuing trend considerably magnifies the problems that climate change brings to nature and people. Especially the poorest people that are also the most strongly dependent on natural resources will suffer. We have already been experiencing the effects of climate change in our lives, the consequences are numerous and grave. The seasons are shifting, the waters are receding, wetlands are drying, and the land is deserting to supply us with sufficient food and shelter.

Wetlands in Lao PDR have now been impacted than ever before. Climate change is causing fundamental shifts in ecological systems as it has already had a profound effect on rivers, lakes, marshes, flooded forests and all other wetland types. That impact will intensify as the momentum of climate change increases and is expressed through dryer dry seasons, wetter wet seasons and stronger storms. Wetland management practices that reduce the impacts of climate change on natural and man-made systems and enhances their adaptive capacity is essential if permanent losses are to be avoided. As a first step, the vulnerability of habitats and species that make up wetlands needs to be better understood. The country's low coping capacity and the ever-increasing high exposure to flooding, including riverine and flash flooding, calls for adopting nature-based solutions to drive climate action that delivers enduring benefits for nature, people and climate through enabling policies and pathways to a resilient future.

Yet the sad fact remains: wetlands may be the primary source of our drinking water, but many of us perceive them as wastelands. Rivers, the cradle of life, are choked with chemical toxins. Our forests are also dying rapidly, and as a result, most of them are vanishing gradually. Priceless species have disappeared while others are threatened with extinction daily. There are major threats facing our wetland ecosystems due to exploitation of natural resources, toxic pollutants, deforestation, land reclamation, and habitat degradation. This continuous raping of our wetlands stems from inadequate awareness and management ineffectiveness.

## Integrated approach

The rate of loss and deterioration of wetlands is accelerating in all parts of Lao PDR. The pressure on wetlands is likely to intensify in future due to increased demand for land and water as well as climate change. The nexus between water, food and energy has been recognized as one of the most fundamental relationships and challenges for our society.

The need to act now in building climate resilience has never been more urgent than shifting towards an integrated ecosystem-based adaptation approach. Realizing the importance of adopting nature-based solutions, the Department of Water Resources of the Ministry of Natural Resources and Environment (MoNRE) in collaboration with UNDP Laos has been implementing the Integrated Water Resource Management and Ecosystem-based Adaptation (IWRM-EbA) project in Xe Bang Hieng River Basin and Luang Prabang City to reduce the climate vulnerability of targeted communities focusing on the impacts of floods and droughts. This initiative has been developing the government's capacity for integrated catchment management and ecosystem-based adaptation interventions with supporting protective infrastructures and livelihood improvements to build climate resilience to the impacts of floods and droughts of the local communities.

In addition, in protecting wetlands for our common future, access to on-farm irrigation water in the lowland of Laos is critical to expand market-oriented agriculture and for climate change adaptation as some of the landscapes are inherently drought-prone due to regular occurrences of poor monsoonal rainfall and extended dry spells. Enhancing resilience of farming systems to climate will become increasingly important as the effects of climate change worsen in the coming years. In recognition of this, the project has been providing groundwater resources, solar pumps, bio-engineering measures for riverbank stabilization, wetland management and capacity building tools to smallholder farmers to access climateresilient irrigation water supplies for the intensification of agriculture and build resilience to the impacts of climate change.

## Charting the course ahead

Wetland management has always been a challenging task for the Government of Laos primarily due to inadequate resources. In a healthy environment, wetlands can greatly contribute to attenuating the water related impacts of climate change. Climate change and its impact on wetland ecosystems are clearly observed today. These impacts will increase in future and are exacerbated for poor people with limited resources for adaptation and strong reliance on natural resources for their livelihoods and economic development. And for many of the poorest and most vulnerable people, it is an urgent need right now, and we must mend our ways to build resilience from the increasing climate vulnerability.

It is high time the government, conservation and development communities integrate wetlands into climate change adaptation strategies. If we want to prevent further degradation of this important ecosystem, there is an urgent need to generate public awareness, create a sustainable financing mechanism for effective wetland conservation, reduce pressure and promote integrated wetland restoration and rehabilitation to safeguard ecological integrity and implement actions to mitigate and adapt to the impacts of climate change.

In conclusion, we must be mindful of the impacts we can have on wetland resources and ultimately it requires a concerted effort by policy makers to create incentives for communities to adopt more sustainable and wise use principles on wetland conservation. I hope that, in the not-too-distant future, everyone who canoes down the Xe Champhone wetland will find it teeming with fish dodging their every stroke. It is nature's resilience that makes this vision of nature-based solutions a possibility, but it is only our resolve that can make it a reality.



The Xe Champhone Ramsar Site, located in Savannakhet Province, provides immense livelihood opportunities and harbours core habitat for the critically endangered Siamese crocodile.

Photo: © Deependra Joshi