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LIFE BELOW WATER

CONSERVE AND SUSTAINABLY USE THE OCEANS, SEAS AND MARINE RESOURCES

Life below water to conserve and utilize marine resources sustainably

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Policy and Commitment to SDG 14: Life below water
Sakon Nakhon Rajabhat University, Fiscal Year 2025

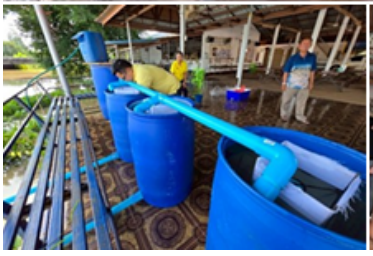
Sakon Nakhon Rajabhat University (SNRU) lies in the Sakon Nakhon Basin, close to Nong Han, one of the largest natural freshwater lakes in Northeast Thailand, and to key tributaries such as the Nam Un River. Although it is far from the sea, the university treats the conservation of freshwater ecosystems as a core mission, because local communities have relied on these waters for food, income and culture for generations. It has established the Nong Han Center of Excellence to lead research and innovation in the development and restoration of Nong Han. On campus, SNRU ensures its activities do not harm local waters. Wastewater passes through a biological aeration system before discharge, and the university reports system operation and effluent quality to the Pollution Control Department every month. It has a policy to maximize water reuse and manages rainwater reservoirs on campus. Its plastic reduction policy helps keep plastic waste out of waterways, and its food policy requires that high-risk aquatic food come from suppliers with recognized sustainability certification. Off campus, the Aquaculture Science program in the Faculty of Agricultural Technology works with riverside communities. It raises awareness of conservation, helps set up fish conservation zones, breeds local fish for release back into the wild, and promotes sustainable aquaculture. This reduces pressure on wild fish stocks and builds long-term food security for local communities.

Key Activities & Projects :

Faculty of Agricultural Technology and local community restore the Nam Un River ecosystem

The Fisheries program of SNRU's Faculty of Agricultural Technology ran a project to raise awareness of conservation and restore the Nam Un River ecosystem at Ban Phok Yai, Phok Noi Subdistrict, Phanna Nikhom District, Sakon Nakhon. Ms. Ornanong Khandet led the project, with a budget of 250,000 baht. The team developed a community training curriculum on aquatic animal production and conservation, taught in the local dialect. It helped villagers understand how fragile their resources are, what their legal rights and duties are, and how to agree on fair rules for using fish conservation zones and protected areas. The team also brought in its "mobile aquatic hatchery kit" so the community could breed local fish, such as silver barb, on site with lower fry mortality. Fry were released back into the Nam Un River, restoring fish populations and the biodiversity of the freshwater ecosystem.







Climbing perch farming training builds livelihoods and food security at Ban Tham Si Kaeo (24–25 June 2025)

On 24-25 June 2025, the Aquaculture Science program of SNRU's Faculty of Agricultural Technology, led by Asst. Prof. Dr. Tharika Thiputhen, ran a hands-on workshop on climbing perch farming at Ban Tham Si Kaeo, Sang Kho Subdistrict, Phu Phan District, Sakon Nakhon. It covered broodstock selection, water quality management, efficient feeding, and disease prevention. The project followed a 2024 community needs survey, which found that wild-caught climbing perch could not meet local demand. Farming the fish reduces reliance on wild catch, creates income, and lays the groundwork for a future subdistrict aquaculture learning center.





Key Activities & Projects :

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Learning center for sustainable management of Nong Han's resources

In FY2025, Sakon Nakhon Rajabhat University (SNRU) promoted learning, research, and development for the sustainable management of Nong Han's resources, under its project to develop a center of excellence in research, innovation, and technology for sustainable community resource management. The work produced a learning center, a Nong Han resource database, and learning materials. The database helps communities plan grassroots economic development, such as eco-tourism; raises public awareness of conserving Nong Han; and provides knowledge for planning the restoration and conservation of its ecosystem.

From Awareness to Action: SNRU's Journey to Protect the Nong Han Wetland

Chapter 1: A Shared Vision Takes Shape (February 2025)

On 8 February 2025, the Nong Han Center of Excellence at Sakon Nakhon Rajabhat University's Research and Development Institute held World Wetlands Day 2025 at Don Doen Public Park, Tha Rae Subdistrict, Sakon Nakhon. This year's theme was "Protecting Wetlands for Our Common Future", and more than 300 local residents attended. The event brought together national, provincial and international partners. Among them were an adviser to the Minister of Natural Resources and Environment, the Governor of Sakon Nakhon, the Director of the Regional Water Resources Office 3 (Udon Thani), and a water management expert from the Stockholm Environment Institute (SEI). Assoc. Prof. Dr. Kongphop Chaa-amat, Vice President for Research, Innovation, and Technology Transfer, represented the university. The highlight was a panel discussion, "Wetland Policy: From International Frameworks to Nong Han," moderated by the Director of the Association for Sustainable Watershed Development. Panelists discussed how to protect Nong Han, one of the largest natural freshwater lakes in Northeast Thailand, and set out the shared goal of having it designated a Wetland of International Importance under the Ramsar Convention. The Nong Han Center of Excellence also hosted "TED Talk Nong Han." Its short talks covered wetland protection, conservation-focused tourism, and community products under the "Wetland BCG" brand, which applies the Bio-Circular-Green economy model to local livelihoods. To raise awareness of the lake's biodiversity, the team handed out posters of Nong Han's bird species. The event gave government agencies, an international research organization, civil society, and local communities a shared platform. Together, they can work to conserve the Nong Han wetland ecosystem and use its resources sustainably for future generations.


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rdi_snru@snru.ac.th rdi.snru.ac.th 0 4297 0011 IP-Phone 260

งานวันพื้นที่ชุ่มน้ำโลก (World Wetlands Day) ปี 2568
"ปกป้องพื้นที่ชุ่มน้ำ เพื่ออนาคตของเรา"
ณ สวนสาธารณะดอนเดิน ตำบลท่าแร่ จังหวัดสกลนคร

Research and Development Institute Sakon Nakhon Rajabhat University





Key Activities & Projects :

Chapter 2: Sharing Knowledge Across the Region (June 2025)

On 5-6 June 2025, the Nong Han Center of Excellence was one of eight SNRU centers of excellence to exhibit its research and innovation at the Northeast regional workshop "Developing Innovation for Sustainable Local Development," held at Chamchuri 1 Auditorium. The event drew 616 participants from 16 educational institutions, giving the center a regional platform to share its work on Nong Han with educators and students across the Northeast.

Chapter 3: A Learning Center for Nong Han (Throughout 2025)

Behind these events, the university built lasting tools for the lake. As part of its project to develop a center of excellence for sustainable community resource management, SNRU established a Nong Han learning center in FY2025, along with a resource database and learning materials. The database supports grassroots economic planning such as ecotourism, raises public awareness of conservation, and provides knowledge for planning the restoration and conservation of the Nong Han ecosystem.

Chapter 4: Looking Ahead

Over the course of 2025, SNRU's work on Nong Han moved from dialogue to public engagement to lasting infrastructure for learning. International students, national and provincial agencies, an international research organization, civil society, and local residents all played a part. Together, they are laying the groundwork for Nong Han to be recognized as a wetland of international importance and to remain a living resource for the communities that depend on it.

Key Activities & Projects : Sustainable Fisheries: Community Education and Participation



In 2025, the Aquaculture Science program in the Fisheries Department of Sakon Nakhon Rajabhat University's Faculty of Agricultural Technology worked with waterside communities to help them use aquatic resources sustainably. At Ban Phok Yai, Phok Noi Subdistrict, Phanna Nikhom District, on the Nam Un River, the faculty developed a community training curriculum on aquatic animal production and conservation, taught in the local dialect. It helped villagers understand how fragile their fish stocks are, what their legal rights and duties are, and how to agree on fair rules for using fish conservation zones and protected areas. The faculty introduced its "mobile aquatic hatchery kit", which lets the community breed local fish such as silver barb on site, and the fry were released back into the Nam Un River to restore fish populations. The community gained both a food source and a new livelihood producing fingerlings. At Ban Tham Si Kaeo, Sang Kho Subdistrict, Phu Phan District, a 2024 community survey found that wild-caught climbing perch could not meet local demand. On 24-25 June 2025, the faculty ran a hands-on workshop on climbing perch farming, covering broodstock selection, water quality management, feeding, and disease prevention. Farming the fish reduces pressure on wild stocks, generates income and food security, and lays the groundwork for a subdistrict aquaculture learning centre in future.

Key Activities & Projects : SNRU's Aquaculture programme shares aquaculture knowledge with students across the region

On 4 December 2025, the Aquaculture Science program of Sakon Nakhon Rajabhat University's Faculty of Agricultural Technology shared aquaculture knowledge and gave university study guidance to students at Ban Phon Phaeng Chiarawanon Uthit 5 School, Kusuman District, Sakon Nakhon. Students learned about technology and innovation in aquatic animal breeding, aquaculture materials and feed, and career paths in sustainable fisheries. The program had earlier visited Phon Sawan Ratsadon Phatthana School in Phon Sawan District, Nakhon Phanom, on 30 July 2025. These visits help young people in the region see aquaculture as a source of food and livelihoods that reduces reliance on wild fish stocks.







Key Activities & Projects :

SNRU and government agencies relocate aquatic animals from Nong Ya Sai pond to natural water bodies

On 8 December 2025, Sakon Nakhon Rajabhat University (SNRU) relocated aquatic animals from Nong Ya Sai pond in the university's Nong Ya Sai Health Park to natural water bodies. Asst. Prof. Chakrit Chanchitpreecha, President of SNRU, explained the operation. The Sakon Nakhon Inland Fisheries Research and Development Center, the Disaster Prevention and Mitigation Center Region 7 (Sakon Nakhon), and the Faculty of Agricultural Technology helped catch and sort species suitable for release into the wild. The animals went to three sites: Nong Han, Huai Tiak Reservoir, and a pond at Wat Pa Khun Kham Wipatsana, Ban Klang, Kut Bak District, Sakon Nakhon. Heads of government agencies, university executives, staff, and students took part. Sorting before release meant that only suitable species entered natural habitats, increasing fish populations and the biodiversity of local freshwater ecosystems and providing a food source for nearby communities.





SNRU establishes the Nong Han Learning Center at Ban Tha Wat.

On 9 August 2025, the Environmental Science program in SNRU's Faculty of Science and Technology and the university's Nong Han Center of Excellence established the Nong Han Learning Center at the Ban Tha Wat pavilion, Wat Maha Phrom Phothirat (Wat Nuea), Lao Po Daeng Subdistrict, Mueang Sakon Nakhon District. Ban Tha Wat sits on the shore of Nong Han, so the center gives residents and visitors a place to learn about the lake's ecosystem, natural resources, and biodiversity right beside the water. Community leaders and villagers joined the opening. The center links the university's research with the communities that depend on Nong Han and gives them a base for conserving and sustainably using the lake's resources.

SNRU and Vietnam's University of Danang surveyed birds at Nong Han wetland, recording a flock of more than 300 Glossy Ibis for the first time in years

On 24 November 2025, Sakon Nakhon Rajabhat University's Research and Development Institute (RDI), the University of Education - The University of Danang (UED), Vietnam, and partners from government, civil society, and the Sakon Nakhon Bird Conservation Club carried out a field bird survey in the Nong Han wetland, Sakon Nakhon. The team recorded a sight rarely seen in Thailand: a flock of more than 300 Glossy Ibis at Don Hin. The species is uncommon in Thailand, and a gathering this large signals the health and richness of the Nong Han wetland ecosystem. It confirms that the lake remains an important habitat for waterbirds and other wildlife and that it deserves serious conservation alongside sustainable uses such as ecotourism, nature education, and biodiversity research. The survey marks another step in collaboration between Thai and Vietnamese universities and partners across sectors to manage natural resources sustainably and raise awareness of the value of the Nong Han wetland.

