



Extract Key Lessons in Sustainable Water Management for Communities

6 CLEAN WATER
AND SANITATION



OVERVIEW

NIDA has extracted valuable lessons on sustainable water management, engaging communities and creating networks with various organizations to promote environmental awareness for a sustainable society. Additionally, NIDA's School of Environmental Development Administration provides training in environmental management and sustainable water management on its own campus.

RESEARCH/ FUNDING

Community water management model

NIDA has conducted significant research under the project "Learning from Community Water Management Models," funded by the Fundamental Fund (FF) of the Office of the Science Promotion Commission, Research, and Innovation (TSRI). This project aims to enable community leaders to apply technology for water management, analyze community potentials, and learn from successful community practices. Its goal is to propose models and management plans tailored to the specific characteristics of each community and to develop a training curriculum for community leaders and stakeholders. Other noteworthy projects funded by the FF include a study on water management indicators for communities that prioritize environmentally friendly lifestyles based on Royal initiatives, as well as a project exploring how water management practices can help revive the economy and society following the COVID-19 pandemic.



ENGAGEMENT

Knowledge sharing, collaboration & sustainable water management

NIDA organized the "Water Festival 2023" on September 23, 2023, with four main objectives:

- 1) promote knowledge exchange, develop critical thinking skills, and instill a sense of responsibility towards oneself, society, and the environment;
- 2) encourage cross-sector collaboration involving local offices, schools, and community leaders to drive positive initiatives;
- 3) to showcase quality community products and foster co-development; and
- 4) to raise awareness of the importance of planting more trees to mitigate climate change.

Moreover, NIDA presented the article "Sustainable Water Management in Agricultural Communities," addressing the impact of climate change on agricultural water management, and how farmers adapt their practices to sustain agriculture while conserving resources for future generations. In Thailand, water issues include drought-induced shortages leading to conflicts, flooding during the rainy season, increased demand from non-agricultural sectors, and chemical contamination from agriculture and industry.

More importantly, NIDA has its online platform, "NIDA Digest," for sharing expert knowledge on these issues and making complex information accessible to the public.



OPERATION

Access, conservation & ecosystem balance

In addition, NIDA provides safe, clean drinking water on every floor of every building, ensuring accessibility for students, staff, and visitors. The institute also promotes water conservation by encouraging faculty, staff, and students to adopt environmentally friendly habits. What is more, NIDA has improved water quality and wastewater treatment by using a combined treatment system (biological discs and closed mechanical systems) in all buildings, discharging treated water into the Pattanantara Pond, which is equipped with solar-powered turbines (Solar PV) to increase oxygen levels. This pond serves as a habitat for various aquatic species, maintaining ecological balance. The overflow pipes direct excess water to the Saen Saep Canal, with water quality checks conducted before its use for irrigation, enhancing water efficiency and ecosystem restoration.

Additionally, NIDA hosted a seminar, "Apologizing to the Ganges through PES," discussing who should bear the costs of preserving water resources and how. This seminar was organized by PhD students from the 20th cohort of the School of Environmental Development Administration.

TEACHING & LEARNING

Molding leaders in environmental sustainability

A core mission of NIDA is education, especially through its School of Environmental Development Administration, which aims to train professionals capable of seamlessly integrating science and art to address social and environmental issues. The program produces administrators, entrepreneurs, and sustainability professionals looking to deepen their knowledge and skills in sustainable development. It offers courses such as the Master of Science in Environmental Management, the Master of Science in Sustainability Studies, and the PhD in Environmental Management.

