Report on SDG15: Life on Land

Thaksin University, Thailand

Thale Noi Wetland is located at the northernmost part of Songkhla Lake, a lagoon that connects the Pak Phanang Basin and the Songkhla Lake Basin. It is Thailand's first internationally important wetland (Ramsar Site). The Thale Noi Wetland has long provided vital support to local communities, especially to more than 50,000 people from 9 subdistricts, 5 districts, and 3 provinces, who directly depend on resources from the wetland. This includes activities such as sedge handicrafts, local fisheries, giant fish traps, coastal rice farming, and buffalo raising.

Swamp Buffalo Farming in Thale Noi Wetland

Swamp buffalo farming' in the Thale Noi Wetland area is a tradition passed down for over 200 years, with its own unique characteristics. The free-range system allows buffaloes to roam and feed freely in the wetland. They have adapted to the wetland environment, taking on an ecological role once held by elephants, which disappeared from the area 75 years ago.

The Ministry of Agriculture and Cooperatives and Phatthalung Province have selected the Thale Noi swamp buffalo to be registered as a Globally Important Agricultural Heritage System (GIAHS). Of the 52 species of animals and plants that have been registered since 2015, no other country has proposed registering swamp buffalo as an agricultural heritage.

Asst. Prof. Dr. Thanapol Yuyen, a Biology Lecturer, Faculty of Science and Digital Innovation, Thaksin University, has done research on the swamp fish under collaboration with Provincial governor and local institutions. In 2023, he shared the story of the Thale Noi swamp buffalo farming way of life through a documentary that connects local wisdom, Southern art and culture, with science. This was done through the media of SCI ACL (Science Art Culture and Local Wisdom Learning Center) via https://scidi.tsu.ac.th/SciNews/182

Professional Training

In this research project, knowledge and technology on artificial insemination were transferred to improve the genetics of Thale Noi buffaloes. This aimed to foster acceptance of artificial insemination technology among Thale Noi buffalo farmers, create model personnel to act as volunteer advisors for artificial insemination, and develop a protocol for using estrus induction and artificial insemination technology for Thale Noi buffaloes. It also sought to address inbreeding issues within the Thale Noi buffalo herd and enhance genetic quality through artificial insemination technology to increase their economic value. Meetings were held with farmer representatives from the Thale Noi buffalo farming group, and hands-on training workshops were provided on estrus induction, artificial insemination, and pregnancy testing technology.