

## SDG 6 - Thomasian Innovation to Sustainable Water Management

The University of Santo Tomas stands at the forefront of competent and novel development, landing at the pinnacle of research, advancement, and innovation. Their fervent acts toward progress are manifestations of St. Thomas Aquinas' efforts to imbue lifelong learning and an inextinguishable search for solutions to his followers. Moreover, Very Rev. Fr. Richard G. Ang, OP, PhD, emphasized the university's prioritization of expanding well-being and enriching research quality, evident in their previous attempts at development.

That said, the university's efforts extend to the fulfillment of the 6th Sustainable Development Goal (SDG): Clean water and sanitation, ensuring that their students and graduates are equipped with the knowledge and skills to piece together a community with sufficient water supply and lessened water waste. In line with that, various projects and activities have been spearheaded by the institution's employees, students, and alumni to promote the aforementioned SDG.

### 1. Infrastructure Initiatives: Campus-Wide Flood Mitigation Effort

#### 1.1. Purpose and Specifications

- UST conducted a comprehensive floodwater drainage project to address the recurring flooding issue at its Manila Campus launched in November 2018. The new system is estimated to hold 11.25 million liters of water.
- The drainage system is four meters deep and designed to temporarily store rainwater before gradually expelling it to the main sewers along Espana Avenue.

#### 1.2. Project Zones and Key Stakeholders

- The construction is divided into seven zones, representing a different project phase for each phase, focusing on replacing old drainage lines and installing flood detention facilities. The zones are as follows:
  - **Zone A** – Arullo Drive (facing the Quadricentennial Pavilion, España side) and Roque Ruaño Drive (facing the Roque Ruaño and Albertus Magnus Buildings)
  - **Zone B** – Arellano Drive (facing the Parade Grounds, España side) and Tamayo Drive (facing the Beato Angelico and Buenaventura G. Paredes, O.P. Buildings)
  - **Zone C** – Osmeña Drive (in between the Parade Grounds and Benavides Garden)
  - **Zone D** – Quezon Drive (in between the Benavides Garden and Multi-Deck Carpark and Quadricentennial Pavilion)
  - **Zone E** – Leon Ma. Guerrero Drive (in between the Multi-Deck Carpark and Health Service) and Ceferino Gonzales Alley Drive (in front of the Santísimo Rosario Parish Church)
  - **Zone F** – Ceferino Gonzales Drive (driveway leading to the A.H. Lacson Gate) and Intramuros Drive (fronting the Arch of the Centuries)
  - **Zone G** – Leon Maria Guerrero Drive (fronting the Hospital)
- The project's main stakeholders include IPM (General Contractor), DCI (Construction Manager), and DCCD (Designer), working under the direction of UST's Facilities Management Office.

### 2. Enhancement of Policies in Water Usage and Regulation

## 2.1. Comprehensive Water Management Policy

- UST has implemented a water usage policy to address increasing consumption due to its expanding population. The policy covers water collection, distribution, storage, and conservation. Due to the increasing population of the University, water usage has likewise increased, calling for immediate action to control water consumption. The university has mandated a policy covering water collection, storage, and conservation, aiming to meet and exceed legal requirements for water management.
- Key initiatives include rainwater harvesting for irrigation and flushing, installation of water-efficient equipment, and regular maintenance checks to prevent leaks and contamination, such as rusting and debris.

## 2.2. Behavioral Change and Community Engagement

- The institution promotes water conservation through awareness campaigns, posters, seminars, and active involvement from the entire community. Regular checks on septic tanks and wastewater systems are conducted to comply with the Code of Sanitation of the Philippines.
- These efforts aim to foster a culture of sustainability among students, faculty, and staff, aligning with UST's mission and vision for a healthier campus environment.

## 3. Partnership and collaboration for sustainability

### 3.1. Environmental Advocacy: Tree Planting Initiatives

#### 3.1.1. [Tree Planting in Rizal Province](#)

- The UST Simbahayan Community Development Office conducted a tree-planting project last October 2022 in Tanay, Rizal. 700 seedlings of Guyabano and Langka were planted by volunteers from the academic staff and partner institutions.
- This event was part of UST's biannual Community Service Day and aligned with the "Season of Creation 2022" theme, emphasizing environmental stewardship; the activity aimed to foster a deeper understanding of ecological responsibility and support local reforestation efforts.

#### 3.1.2. [One Million Trees for Sierra Madre Project](#)

- UST Institute of Religion, together with partner organizations, headed a tree-planting event in Siniloan, Laguna in October 2022. The program, part of the "One Million Trees for Sierra Madre Mountain Range" campaign, focused on educating participants about the ecological importance of the Sierra Madre mountain range.

#### 3.1.3. [Seminars for tree-planting](#)

- UST Faculty of Engineering members participated in discussions highlighting Republic Act 10176, or Arbor Day Act of 2012, which mandates citizens to plant one tree annually.

### 3.2. [Coastal clean-up in the name of St. Thomas Aquinas](#)

- In commemoration of St. Thomas Aquinas, the UST SIMBAHAYAN Community Development Office headed a coastal clean-up in Las Piñas-Parañaque Critical

Habitat and Ecotourism Area last January, part of their annual community rehabilitation efforts.

- 53 Thomasians participated and collected 592 kilos of garbage along the area.

### 3.3. Research efforts for marine well-being

#### 3.3.1. [Investigation on Leyte's Ormoc Bay](#)

- Thomasian biologists and microbiologists assessed the pollution and anthropogenic stressors in Leyte's Ormoc Bay last August 2024. A total of 26 sites along the watershed, such as mangrove forests, coastal areas, estuaries, streams, rivers, and Lake Danao, were examined to aid in the conservation of the Ormoc Bay.
- The UST Department of Biological Sciences monitored the water quality and ecosystems of the samples.
- Notable members who contributed to the project's success include Department of Biological Sciences Chair Asst. Prof. Reuel Bennett, Dr.rer.nat., Inst. Elfritzson Peralta, M.Sc., Marine Biology team members Inst. Allan Gilles, M.Sc. and Inst. Eunice Aaron, M.Sc., Freshwater Biology Team Inst. Justine De Leon, M.Sc. and Inst. Kenneth Xavier Sanchez, M.Sc.

## 4. Crucial Information Dissemination within the university

### 4.1. Promoting Marine Conservation through a Screening of "Bakawan" Documentary

- UST spearheaded a special screening of the documentary "Bakawan," directed and narrated by Dr. Lemnuel V. Aragonés from the Institute of Environmental Science and Meteorology at the University of the Philippines (UP) and edited by cinematographer Teddy Tan Jr from the UP-Visayas. The film explored the significance, challenges, and restoration efforts of mangroves in Alabat, Quezon Province.
- A panel discussion with environmental experts Dr. Aragonés, Mr. Tan, Dr. Cecilia B. Moran, Ms. Genea Nichole Cortez, and Dr. Dino S. Tordesillas was held following the screening, focusing on the threats to marine-estuarine ecosystems and strategies for integrating sustainability into education.
- The event included a lecture on Philippine marine mammals by Dr. Aragonés, emphasizing the current state of these species and the need for conservation efforts. The lecture series was part of UST's initiative to raise awareness about biodiversity and environmental sustainability among its community members.