

Waste Water Treatment in Industrials & SME's Sectors

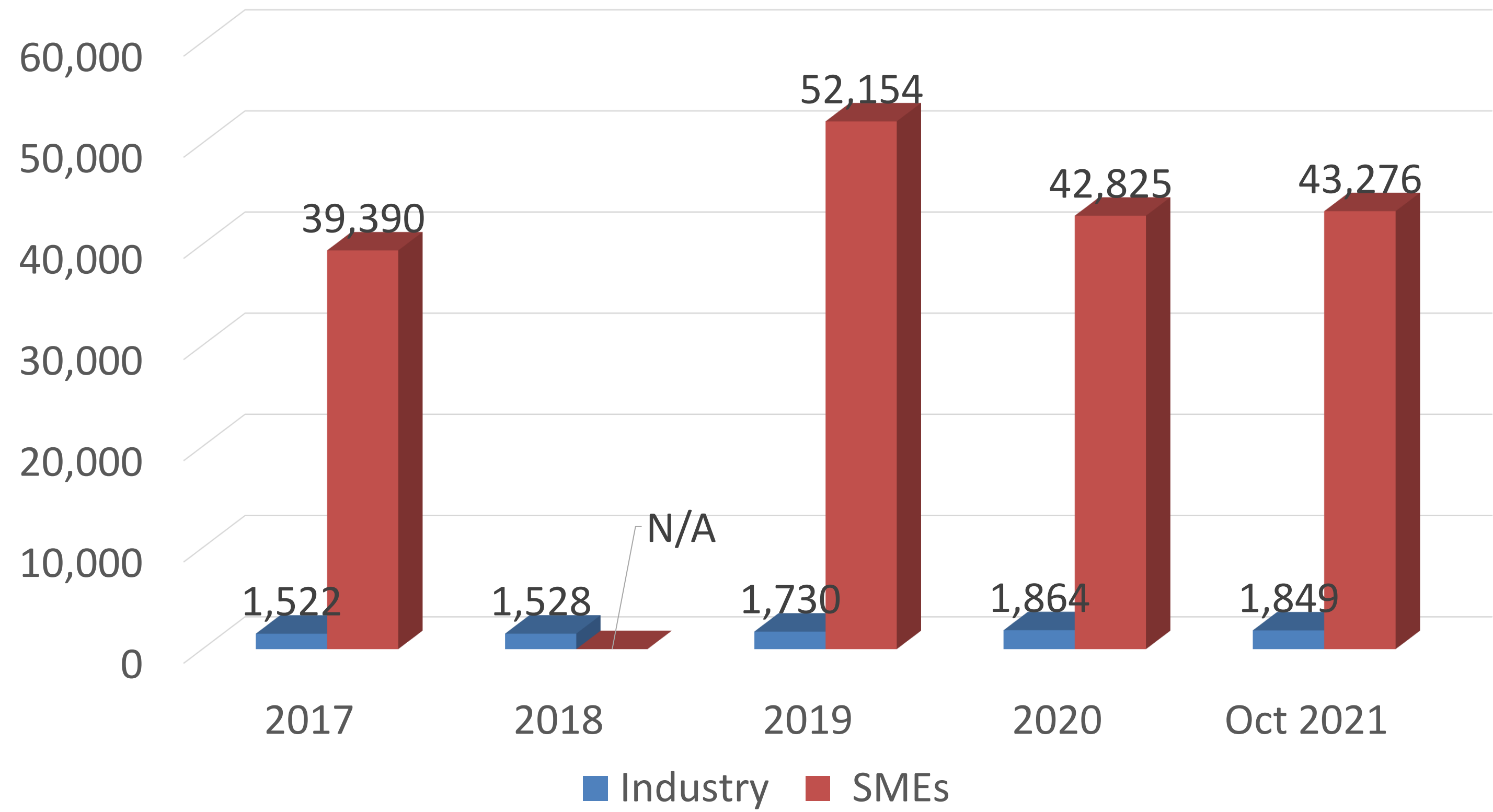
Implemented by: Ministry of Industry, Science, Technology and Innovation (MISTI), Partner: UNIDO Phnom Penh Office  
Project location: Phnom Penh, Kandal, and Battambang provinces

Abstract, Waste Water Treatment

The wastewater from industries varies so greatly in both flow and pollution strength. The industrial wastewaters may contain suspended, colloidal and dissolved (mineral and organic) solids. In addition, they may be either excessively acid or alkaline and may contain high or low concentrations of colored matter. These wastes may contain inert, organic or toxic materials and possibly pathogenic bacteria The industrial wastewater treatment, recycling, and reuse is an important theme in today's context, not just to protect the environment from pollution, but also to conserve water resources so that water stress is reduced.

- As registered with MISTI, the manufacturing industry (big scale) & SMEs slightly increased from 2017 to 2021 with the subsectors by ISIC Rev4.

The Manufacturing Industry & SMEs, 2017-Oct 2021



Objective

The overall objective of this project is to develop an innovative approach to reduce GHG emissions from waste water for SMEs in the food and beverage industry.

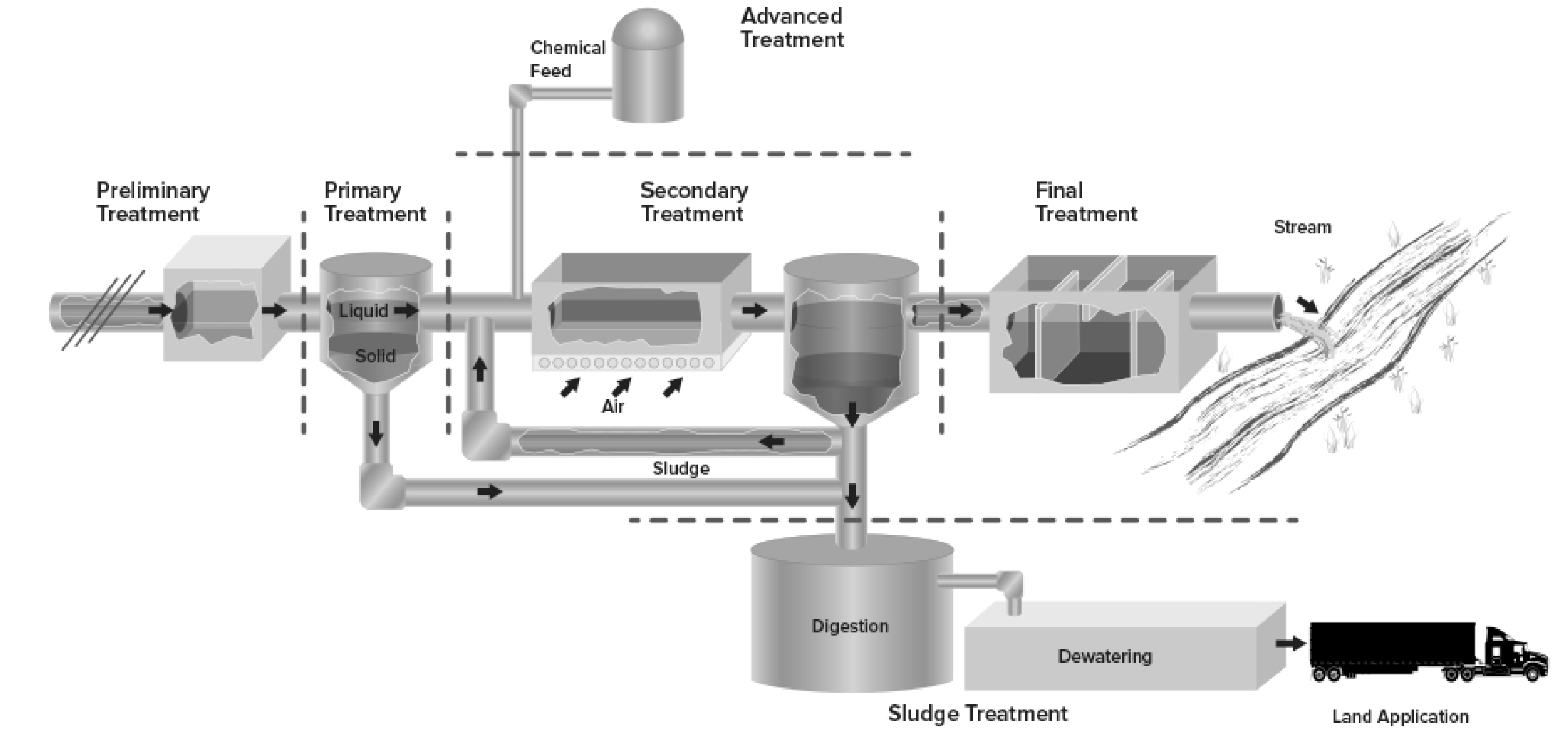
The project is also focused on these following outcomes:

- Improved knowledge and understanding in MISTI on GHG emissions from industrial waste water and potential technologies for SMEs to reduce these emissions
- Low carbon technology and management practices for waste water management are demonstrated
- Lessons learned from demonstrations disseminated with government and private sector decision makers
- Strengthened regulatory and financing environment for low carbon IWW

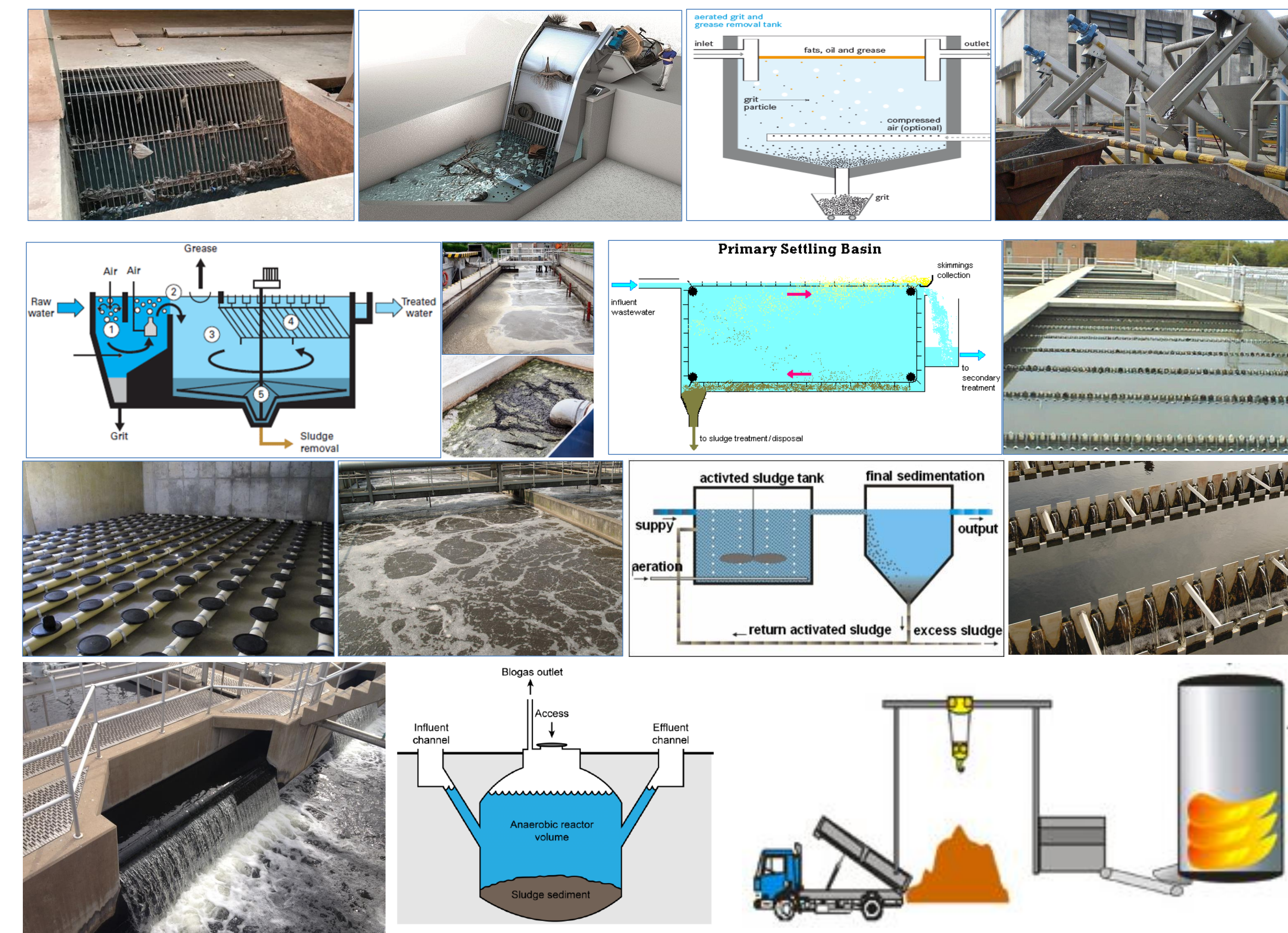
Knowledge gain & Technology

- The subsectors such as textile, dyeing, printing, paper & palping, bio-energy, cement, food production and beverage..., generally recognize the need to clean their wastewater through wastewater treatment facility before discharging, in order to maintain their business with environmentally sound and to comply with regulations of relevant Ministries and National/Local Authorities, MOE, MISTI, P.P Municipal Authority...

- During the Capacity building program and Knowledge sharing workshop 2019, 2021, the topic of Wastewater treatment process has been shared with general flow chart of WWT process



Preliminary Treatment --> Primary Treatment --> Secondary Treatment --> Final Treatment and Solids Processing



Implementation Progress

Due to covid 19 outbreak in Cambodia have made an powerful impact on the project implementation. However, we are still able to conduct some activities such as:

- Project launching ( 8<sup>th</sup> September 2021 via zoom)
- Successfully selected 17 participants from various sector such as food & beverage, agricultural, etc.
- Preparing workplan and training material

Next activities of key relevant departments, institution, incl. D/TIS of MISTI:

- Continue the awareness raising and capacity building programs on industrial pollution control and wastewater treatment for relevant stakeholders
- Prepare the Ministerial regulation & technical guideline for wastewater treatment management
- Cooperate with development partners, local and international for upgrading skill and techniques in wastewater technology for government officials of MISTI
- Cooperate with development partners, both local and international in smart monitoring system for wastewater treatment plant/facility in production area
- Cooperate with METI, Jap to establish the pollution control management system in manufacturing industry and SMEs
- Law enforcement for monitoring of industrial pollution and waste management in production site

