

# **International and National Collaboration Approach on Constructed Wetland as Natural Treatment for Sewage Treatment at Ubon Ratana Dam Sub District Municipality, Khon Kaen Thailand**

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**ABSTRACT:** Constructed wetland as natural sewage treatment established at Ubon Ratana Dam Municipality, Khon Kaen, Thailand has demonstrated as the success project conducted by the strong collaboration of academic institutes and governmental agencies. The universities include Chia Nan University of Pharmacy and Science (CNU, Taiwan) and Khon Kaen University (KKU, Thailand) as the knowledge transfer organization under the collaborating support of the regional governmental office (Regional Environmental Office, REO 10) as the policy and planning organization and local government (Ubon Ratana Dam Municipality) as the operating organization. Collaboration could be accomplished under 3M concept including mutual interest, mutual understanding and mutual respect. In addition to 3M, two more factors called as 2F which are mutual fund and mutual fun have to be significantly cooperated to such accomplishment. This paper, therefore, presents how to successfully implement the project in terms of international and national collaboration approach and will not cover technical design.

**KEYWORDS:** international collaboration, regional and local administration organization, natural treatment, constructed wetland, sewage treatment plant