

Preface

Tropical wetlands functions for humankind like the prevention of flood, water reservoir, waste absorption, livelihoods, wildlife products, and forest products. Less study of tropical wetlands whether inland freshwater systems or coastal and mangrove system benefits has been undertaken.

It is estimated that more than half of wetland areas around the world have eliminated and the remains are significantly impacted by human activities. Agricultural landscape and urban have contributed to the loss of wetlands. Moreover, habitat fragmentation due to infrastructure growth in developing countries pressures biodiversity and habitat loss. However, in the last 30 years, the science of wetlands has matured and contributed to wetland conservation and creation, particularly in urbanized areas. The study of wetlands requires a multi-disciplinary approach toward the beneficial values of wetlands.

Nowadays wetland managers and practitioners are faced with considerable challenges and responsibilities to consider and fully understand not only all of the traditional components of wetland sciences such as ecology, geology, and engineering; but also the socio-political and economic aspects of the discipline. Some signs of progress were showed in certain countries like the Netherlands and the United States in the form of wetland creation, restoration, and enhancement. However, fewer wetland projects succeed because of a lack of communication with the project team and society and various disciplines and practitioners involved in wetland projects. Therefore, wetland projects need research synergy and contribution from diverse disciplines to propose an adaptive management strategy to bring successful projects. The complexity of wetland requires the integration of ideas and seemingly unrelated disciplines to propose wetland creation and restoration projects.

For example, ecologists study about wetland ecology and engineers about treatment wetland engineering, and so on. However, no ecologists have the opportunity to learn about engineering and vice versa. The publication is difficult to understand or at least challenging for non-specialists and this made project managers generally fail to appreciate the valued insight. The final is that the barrier between practitioners appears and very much compartmentalized.

Therefore, the first international conference on Tropical Wetland Biodiversity and Conservation aims to remove the obstacles and the boundaries ineffectively communication between disciplines. The same levels of understanding or consensus among all participants need to take into account.