

Outline of the UN Presentation

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Water Project in Cambodia

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Preamble

The author received an NSF grant to organize “Workshops for Scientists and Engineers” on general civil engineering issues related to the rapid development of tourism in the Historic Site of Angkor, Cambodia. The subtopics are environmental problems of drinking water and sanitation (Phnom Penh Conference), structural degradation and historic preservation (Siem Reap Conference: Institute of Environment and Global Technology Solution), and advancing engineering education with computer (at one of the campuses of Build Bright University, site to be decided).

The theme: “CARING COMMUNITIES FOR THE 21st CENTURY: IMAGINING THE POSSIBLE,” which focuses on *Age of Connectivity: Cities, Magnets of Hope*, will be addressed within the context of “Water Purification in Cambodia,” at a Phnom Penh Conference. The local hosts are ITC (Institut de Technologie du Cambodge) and Panasastra University of Cambodia.

Background research

After three planning meetings before the NSF grant was received the author summarized the following topics in various research reports:

1. Degradation of foundations of historic structures due to ground water
2. Water management as tourism grows
3. Special requirements for Civil Engineering Curricula to meet the demand of growing tourism
4. Social implications and engineers’ awareness on impacts of tourism for economically challenged communities

In May 2004, the author and the AIT Head Nanotechnology addressed a conference at the Phnom Penh campus of Build Bright University that focused on Advanced Engineering Science, Computational Mathematics and their applications in environmental problems.

The other academic speakers were the Rector of the University and Director of the Advance Engineering Program. They focused on the curriculum development emphasizing the practical needs of Cambodia.

In December 2004, the author undertook a site visit in the Angkor region with Professors of Asia Institute of Technology (AIT), their Dean of Civil Engineering and the Head of the Advanced Materials and Nanotechnology.

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