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Jenn-Chuan Chern is the Deputy Minister of Public Construction Commission of Executive Yuan, Taiwan. He also serves as the Deputy CEO for Morakot Post-Disaster Reconstruction Council, Executive Yuan. He was the Distinguished Professor of Civil Engineering at National Taiwan University. He is a fellow of ACI and



a member of Russia International Academy of Engineering. Dr. Chern is the immediate past chair of Executive Committee of Asian Civil Engineering Coordinating Council (ACECC) and the vice president of the Asian Concrete Federation (ACF). He was the president of Chinese Institute of Civil and Hydraulic Engineering (CICHE) and is the founder and past president of Taiwan Concrete Institute (TCI). Dr. Chern received his Ph.D. in civil engineering from Northwestern University in 1984. His research interests include concrete materials & mechanics, with emphasis on creep and shrinkage, pozzolanic materials, SCC and advanced fiber-reinforced cementitious materials. Dr. Chern is the recipient of many awards, including Outstanding Research Awards from National Science Council of Taiwan; Significant Contribution to 921 Chi-Chi Earthquake Reconstruction Award from Post-Disaster Recovery Commission of Cabinet. In 2008, he received International Contribution Award from Japan Society of Civil Engineers (JSCE) to honor his outstanding efforts in upgrading the concrete technology and his leading role in promoting the cooperation among civil engineering societies in Asia.

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The Strategies and Post-Disaster Reconstruction of Typhoon Morakot in Taiwan

On the seventh of August, Typhoon Morakot brought its copious rainfall to the southern Taiwan with the rainfall amount up to 2,965 mm recorded in Alishan. This record breaking rainfall, combined with untimely high tides, kept the water ever rising, gradually building into a catastrophe. There were 699 deaths and missing, and over 8,000 left homeless. Six major highways were seriously damaged and several isolated islands in high mountain area were formed under the torrential rains. After the assessments of safety of townships and villages in high mountain areas, half of villages lived by indigenous people were ranked as unsafe in 90 sites investigation.

In order to deal with the recovery and reconstruction of the Morakot disaster, the government took the immediate measures to face the challenges. Morakot Typhoon Post-Disaster Reconstruction Special Act was approved by Congress on August 28 and declared by the President on August 29, 2009. The Act was used as the amendment to the "Disaster Prevention and Protection Law". The Morakot Post-Disaster Reconstruction Council of Executive Yuan was formed on September 12, 2009. The budget for the reconstruction plan is NT\$ 120 billion and was declared by the President on Nov. 20, 2009. Another NT\$ 35 billion was added from reallocated annual budget for immediate relief.

There were four reconstruction plans developed including regional reconstruction plan with land conservation guidelines, civil infrastructure reconstruction plan 、community reconstruction plan & industry reconstruction plan then follow the rule of respecting the Nature, escaping from disaster, river basin integration, as the foresight action. This lecture will present the efforts Taiwan has devoted in the first half a year after the typhoon. The reconstruction strategies and execution results will be introduced in this lecture.