# The nexus of Soft Power, Theater Security Cooperation & Engineering Education

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For the

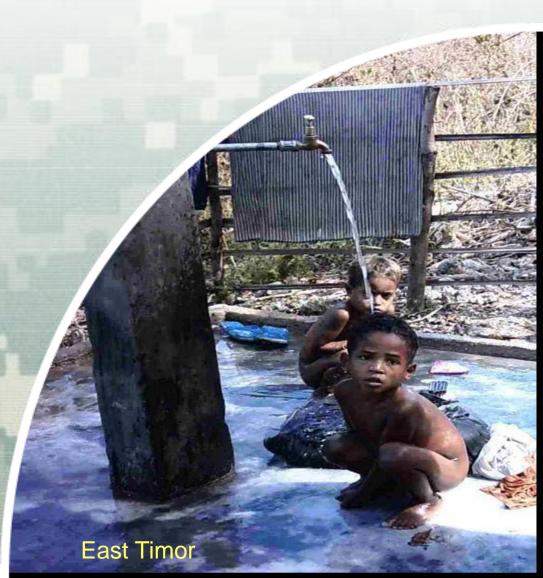
American Society for Engineering Education – 2012 EDI Kauai, Hawai'i

17 Apr 2012



(RBM/Version 3, Jan 2012)

US Army Corps of Engineers
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#### Soft Power

Mongoira

Obina

- Prevent, Deter, Win
  - 3 D (Defense, Diplomacy, Development)
    - "Whole of Government" approach
  - Phase zero
  - · Effects based
  - Why?
- Water & Environmental Security

Houses

- Food, health, energy nexus
- □ HA/DR (Humanitarian Assistance/Disaster Relief)
  - Common ground
  - DOD unique capabilities
- □ Asia Pacific focus
  - Sustainability (i.e., water)
  - Climate challenges (e.g., sea rise on Island Nations, coastal protection, flood risk, glacier melt, etc)
  - Natural vulnerabilities (e.g., tsunami, earthquakes, hurricanes, etc)
  - Basin Development (e.g., Mekong)



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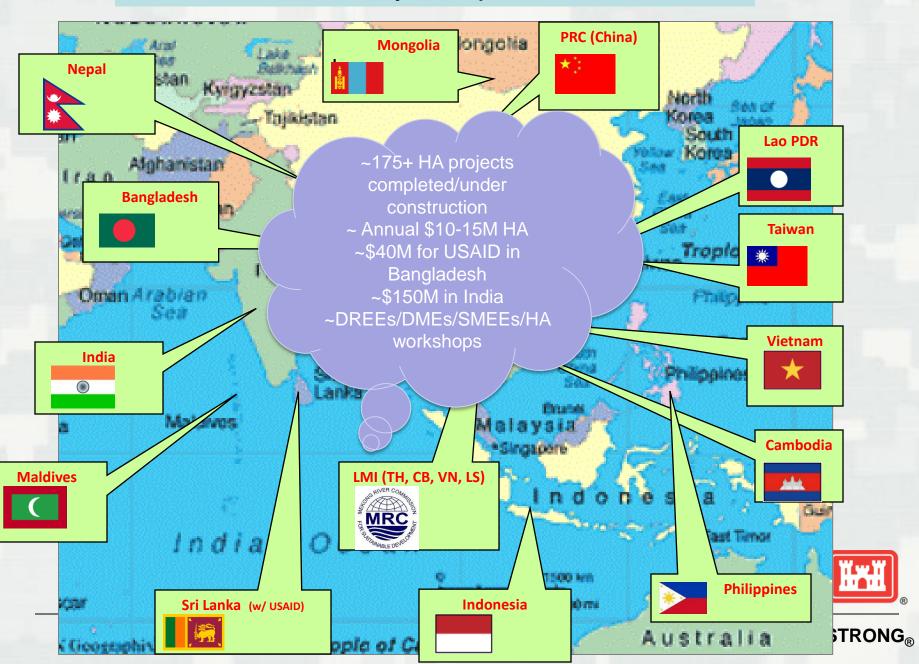
Australia

## Theater Security Cooperation "Tool Box"

- □ Humanitarian Assistance (HA) Projects
- □ International Capacity Development
  - Technical/SME assistance in Water (food & energy nexus) & Environmental Security, Master Planning
- □ Disaster Risk Management
  - Disaster Response Exercises & Exchanges (DREE) & Disaster Management Exchanges (DME)
- □ Engineering & construction management



#### **Theater Security Cooperation Efforts**



## Humanitarian Assistance Projects - Clinics











**Attapeu Medical Clinic** 





**Binh Lu Medical Clinic** 



#### Humanitarian Assistance Projects- Schools









**Ky Son Primary School** 









**Boulapha Primary School** 



## Humanitarian Assistance Projects- Schools





Rokarpopram Primary School



Sri Lanka



Pulipanjakal School Repairs



## Humanitarian Assistance Projects - Shelters & Emergency Ops Centers



#### Bangladesh





**Cyclone Shelter & School** 







**Vietnam** 



Tam Ky Flood Management Operations Center



#### Humanitarian Assistance Projects - Improved Roads & Bridges



**Philippines** 





06-08 Three Southern Philippines Road Repair Contracts in Conflict Areas

Before



Cambodia

Before



Provide farmers road access during rainy season



Khvet Farm Road (3 Km)
with Drainage
Culverts (approx 1m fill)



Bangladesh



Before







2000 people daily use, school access-- 2 km around when it collapsed

New bridges at Asalot Ward & Kalapara Upizilla & Barisal Districts

4 New Bridges (50m x 4m)



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#### Humanitarian Assistance Projects – Water Supply



**East Timor** 



12 Community Distribution Taps



Overnight Storage tanks





**Community Toilets** 



Before



 No direct source of water for entire village

- Potable water primarily from carrying water jugs about 1-2 miles up mountain from a natural spring
- Provided 12 community water taps & toilets,

#### **Facilities**



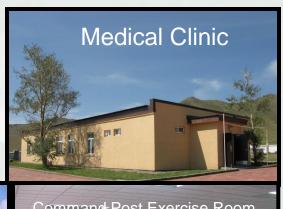
#### **Five Hills Training Center**

- Barracks and Dining facility
- Medical Clinic and Gym
- Utilities upgrade
- HQ Bldg Renovation





Ribbon Cutting Ceremony of Classroom #3 & CPX FAC







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#### International Capacity Development



 GIS and Hydrologic & Hydraulic modeling Workshops with USAID & HEC for ~2.8 km Selbe River embankment FC improvements









**Nepal** 

- Seismic Vulnerability & Inspection Workshop
- Airfield & bridge seismic evaluation & assessment
- Airfield runway physical assessment









#### Disaster Risk Management

Disaster Response Exercise and Exchanges (DREEs) and Disaster Management Exchanges (DMEs)

- DREEs
  - > Bangladesh

> Indonesia

> Nepal

- Vietnam (w/LMC\*)



- Typical Scenarios:
- -Earthquakes
- -Flooding
- -Tsunamis
- -Pandemic

- Disaster Management Exchanges
  - Peoples Republic



- of China
- > Taiwan





#### Technical Assistance- Lower Mekong Initiative (LMI)



ANDAMAN SEA

říkobar Islands

PHUKET

MYANMAR (BURMA)



THAILAND (SIAM)



KAMPUCHIA (CAMBODIA)

SINGAPORE

INDONESIA

BOR



DOS initiative



- Mekong River Commission-Mississippi River Commission Sister partnership
- MRC-USACE 5 yr Collaboration Plan
  - Technical workshops
  - Technical collaborations
  - SME exchanges



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#### **Engineering Education**

□ Ability to connect the dots (outside your functional area)



- ☐ Knowledge versus data points
  - Understanding vs "Google" searches
- □ Verbal and writing skills
  - Ability to communicate complexity into simple terms what is the problem, potential course of actions (pros & cons), and the recommended solutions to decision makers.
- ☐ Capstone courses (putting it all together)
- Pentathelete
  - Technical expert, diplomat, facilitator, communicator, visionary

# Summary

- ☐ Engineering skills/competencies vital for soft power
  - Technical expertise (glue) to Connect the dots
    - 3-D (Defense, Diplomacy, Development)
    - "Whole of government" approach
  - Effects based (watch out for unintended consequences)
- □ Capacity development
  - Engineering skills!
  - Water, food, health, energy .....nexus
  - Sustainable solutions: life-cycle management
  - "Green" facilities: environmentally sensitive ->compliant
  - · Its about people!
- □ Engineering education
  - Balance sound technical skills with soft skills
  - Global perspective (move from strategic to tactical and back)
  - Pentathelete (good at many skills)



# Questions



#### Connecting the "dots"



 National Security goals Socio-economics Regional goals Country goals Gender equality Religion Human trafficking E Culture Contracting Design criteria Environment Risk management Water security Climate change (food, energy, health nexus) Resilience