



## First Mekong Resources Forum

# Water Security & Implications to Sustainable Development in the Lower Mekong Basin.

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People and Nature Reconciliation, 2011

# The Lower Mekong Basin

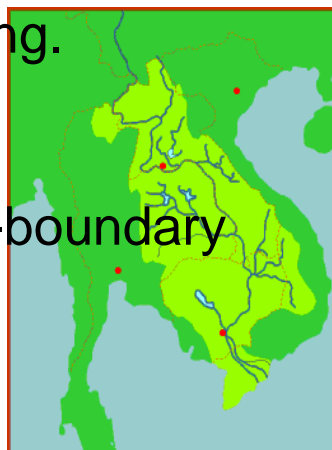
The Lower Mekong Basin is the Cambodian, Laotian, Thai and Vietnamese parts of the Mekong Basin.

Total area: 606,000 km<sup>2</sup>, covering 86% of Cambodia's area; 97% of Laos; 36% of Thailand; and 20% of Vietnam.

Population: est. 62 millions people

Est. 80% population relied on farming.  
Rice cropping is predominant.

Mekong as Mother River with trans-boundary and watershed-shared tributaries.



# Water Uses in LMB



- Water supply:
  - agriculture (85%) + domestic and industrial uses (15%)
- Irrigation:
  - mainly in the Delta for irrigated agriculture & curbing salinity intrusion
- Fisheries:
  - supplies protein over 80% e.g. Cambodia + income generation
  - Est. 2.3 million tons per year
- Navigation and transport
- Tourism services
- Hydropower development:
  - 12 proposed mainstream & tributary dams: transboundary impacts
- Watershed management:
  - LMB – a complexity of forest, wetland and coastal ecosystems
  - Eco-region & transboundary ecosystems
  - Ecosystem services as goods?



# What is Water Security?

- Water security v.s water insecurity – unsustainable use and management.
- Threats – natural & human-induced causes to water quantity and quality e.g. water scarcity, flood
- Trade-offs in national/regional development
- Good/bad water governance v.s hydropolitics e.g. conflict and cooperation on transboundary rivers.
- ....

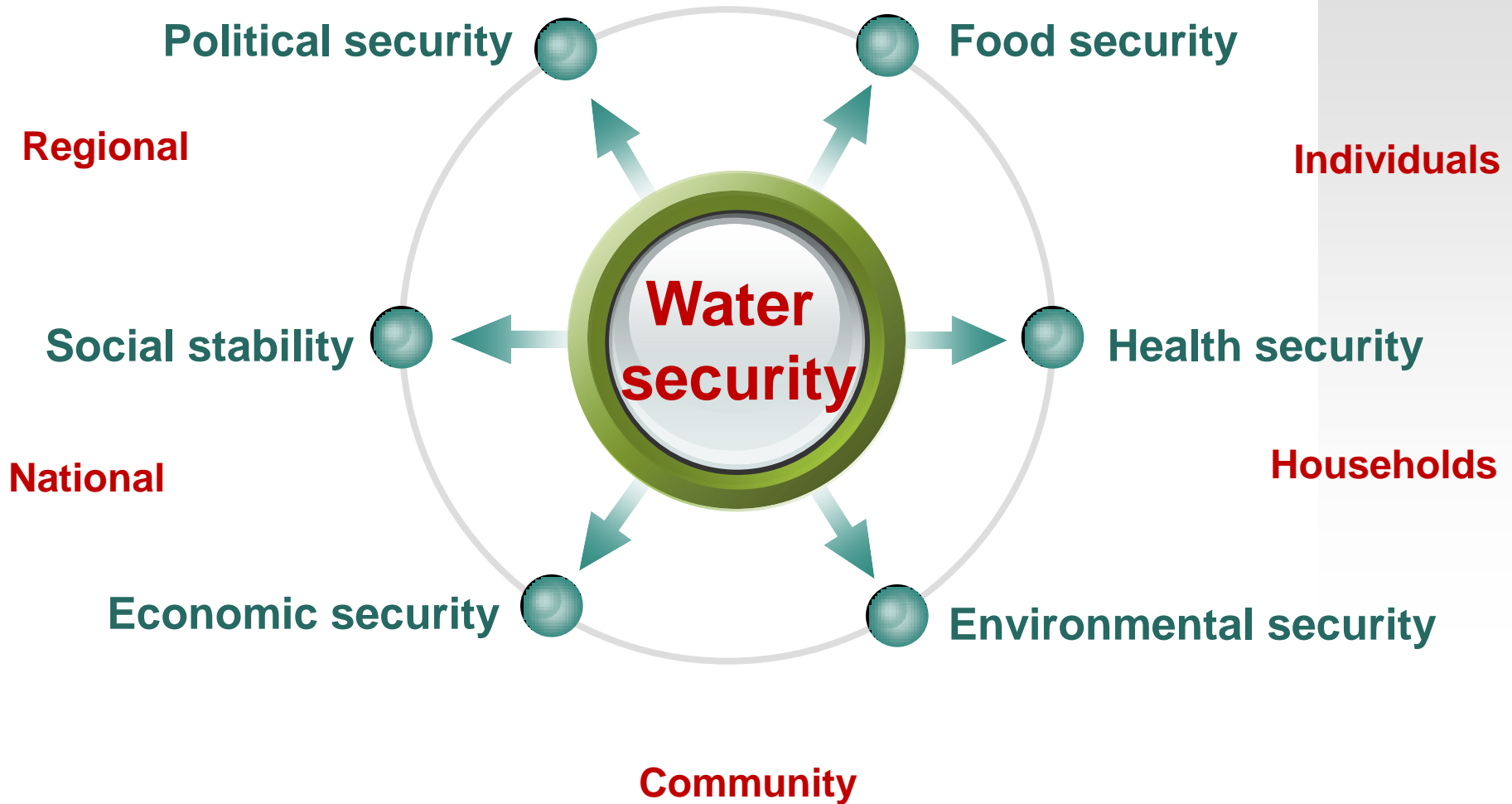
# What is Water Security?

## Global Water Partnership's global strategy 2009-2013:

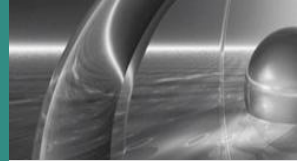
A water secure world harnesses water's productive power and minimizes its destructive force. It is a world where every person has enough safe, affordable water to lead a clean, healthy and productive life. It is a world where communities are protected from floods, droughts, landslides, erosion and water-borne diseases. Water security also means addressing environmental protection and the negative effects of poor management.

Sustainable development will not be achieved without a water secure world. A water secure world integrates a concern for the intrinsic value of water with a concern for its use for human survival and well-being.

# Water Security: Interconnectedness & Interdependence



# Better understanding of threats and causes to water insecurity in LMB?



- Increased population, migration and resettlement
- Increased consumption of energy and water
- Deforestation and shifting cultivation, watershed encroachment
- Negative impacts of large dams, infrastructure and to aquatic ecosystem
- Adverse impacts of land degradation and industrial pollution
- Increased salinity intrusion and acid-sulphate soils and impacts of irrigation works
- High water demands of dry season rice cultivation
- Agrochemical contamination
- Changes in the hydrological and morphological regimes, particularly in river downstreams
- ....???





**Thank You !**