



MRC Fisheries Programme

Fish for food security in the Lower Mekong Basin

International Conference on
Transboundary River Basin Management
Phuket, Thailand, 1-3 May 2012

The Basics



- **UN Universal Declaration of Human Rights (UDHR)**

Article 25: Everyone has the right to a standard of living adequate for the health and well-being of himself and of his family, including food,

- **MRC Agreement 95**

socially just river basin development

- **FAO (2008): Food Security**

...is a situation that exists when all people, at all times, have physical, social and economic access to sufficient, safe and nutritious food to meet their dietary needs and food preferences for an active and healthy life.

Nature of Mekong Fisheries



- **Wild fish is free**
 - Fisheries in the Mekong basin is one of the richest fisheries in the world
 - No production costs
 - Minimum investment costs for fishing gear (small scale nature)

- **Highly disperse** (from flood plains to up-lands)

- **Highly seasonal** character:
 - Constant supply through multitude of traditional products and preparations

- **Trans-boundary** / Cross-boundary nature of fish stocks

Fish Production



- **Wild fish:** >2.3 million tonnes of wild fish and other aquatic animals (**OAA:** Crabs, Shrimps, Frogs, Snakes & other reptiles, Insects, Molluscs – clams and snails, etc.)

Approx. 20% of world's inland capture fisheries production

- **Aquaculture:** approx 1.9 million tonnes

Value of Fisheries



- Between 3.0 to 7 billion US\$ (at first sale prices)
- In addition to other values
- Replacement costs ?
- Profitability?

Social Access



.....via political, communal, familial “non-market” mechanisms

- Subsistence fisheries
- Lao PDR: 70% of rural households depend on fisheries
- Mostly small-scale nature
 - ✓ only Cambodia partly large scale)
- Women and children play important role (ensuring food supply to frequently food insecure groups)
- Community fisheries
- Large participation throughout value chains

Economic Access



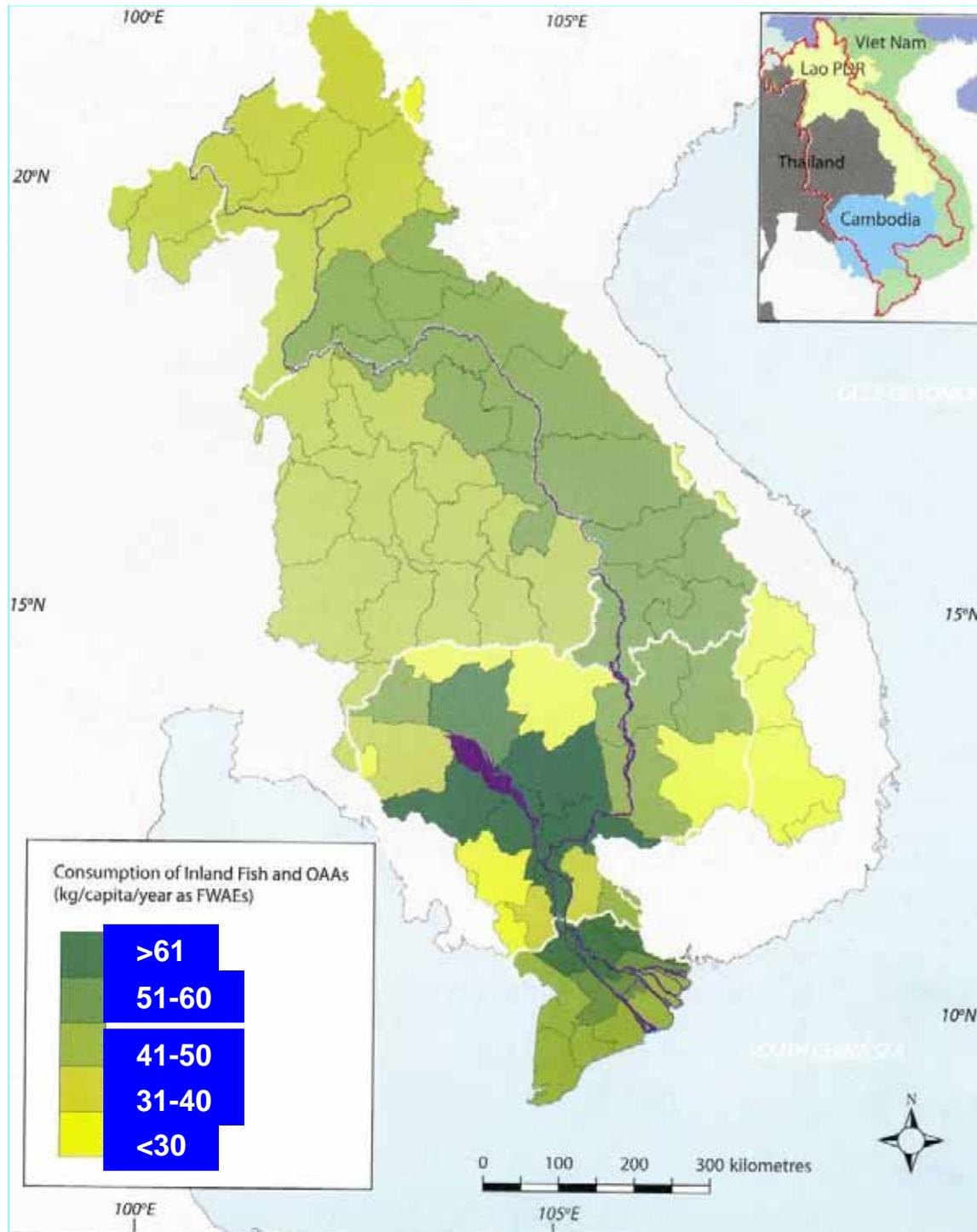
.....via market mechanisms, purchasing power

- 40 Million people in LMB (66%) involved in fisheries (at least part-time or seasonally)
- High employment factor throughout value chains
- High income generating factor throughout value chains
- Affordable, especially for poor people
- Cambodia: Fisheries represents >10% of GDP



Consumption of Inland Fish & OAA

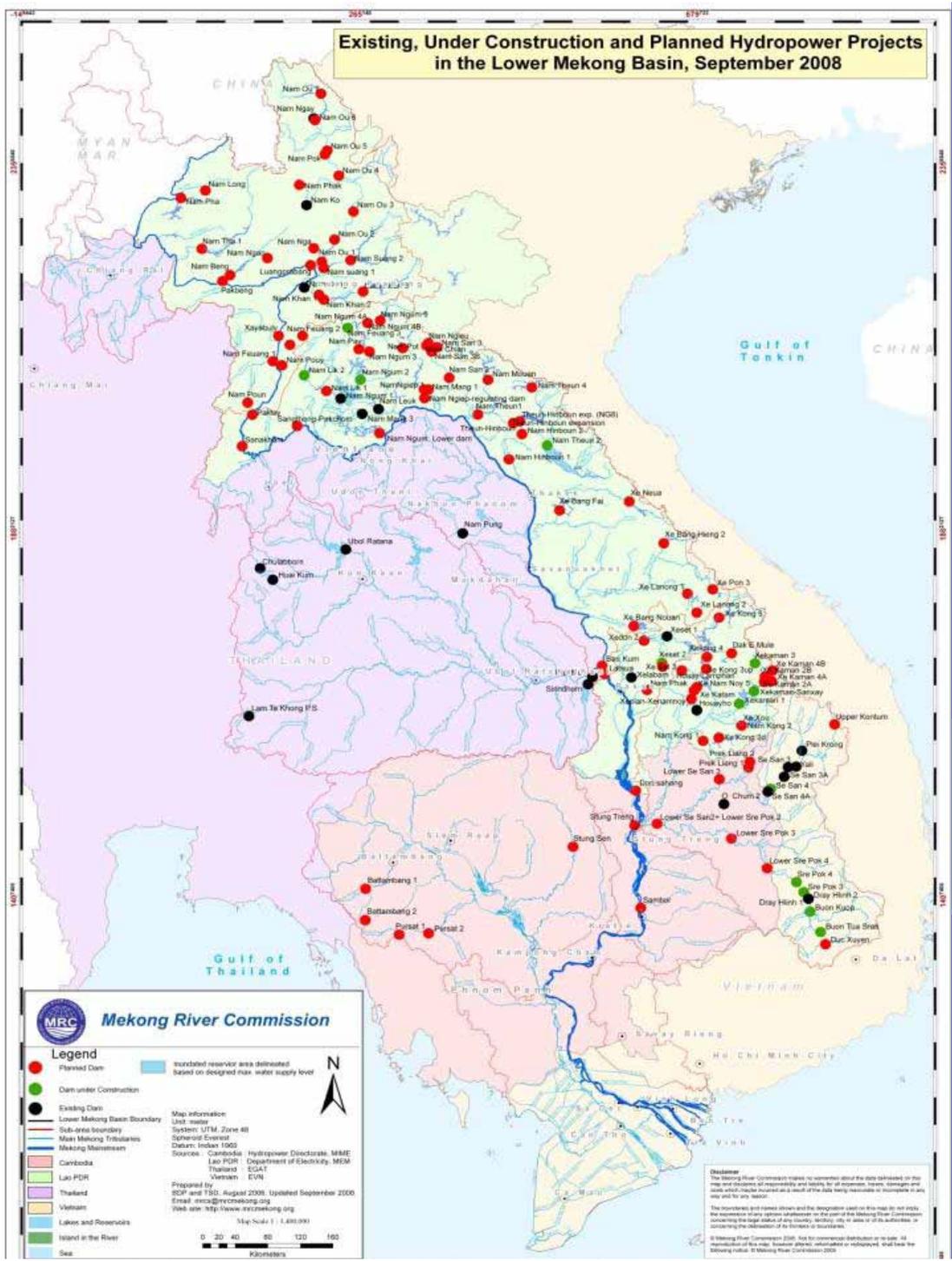
In kg/capita/year as FWAEs
Fresh Whole Animal Equivalent weights



Contribution to food security and nutrition



- Supplies up to 60% of high quality animal protein
- Micro nutrients & Vitamins (A + D)
- Minerals (phosphorus, magnesium, selenium, and iodine)
- **“Milk of Southeast Asia”**
- Fish as staple food:
 - Dried
 - Salted-dried
 - Smoked
 - Fermented fish products
- Large portion of fish for subsistence consumption



Dam Construction in the Lower Mekong Basin

Impacts of Hydropower (Energy) Development on Fisheries



- **Obstruction to fish migrations**
 - Disconnection of vital lifecycle habitats
 - Up-stream (spawning/refuge) migration
 - Down-stream fry and larvae drift

- **Alteration/deterioration of vital habitats**
 - Loss of deep pools through sedimentation
 - Reduction of feeding grounds (flooding)

- **Aquaculture cannot compensate losses to supply.**

Impacts of Hydropower (Energy) Development on Fisheries



Example Cambodia (preliminary studies by IFReDI)

- Population growth: 14 million (2011) to 20 million (2030)
 - Reduction of supply of inland fish and OAA is declines from 49 kg/capita to 34 kg/capita (2030).
 - Additional mainstream Mekong dams:
 - Further reduction to levels between 22-32 kg/capita
- Threat to food security of large proportion of the population.

Conclusions



- Inland fisheries provide irreplaceable source of food and aquatic biodiversity.
- 40% of current annual fish catch at risk from mainstream dams.
- Only part of the loss might be compensated by increasing reservoir & rice field fisheries.
- Lack of attention to inland fisheries is a major threat to its sustainability.

Recommendations



- Securing food has to be at the centre of development strategies in the region as human rights are non-negotiable.
- Integration of fisheries management issues into basin development planning
 - ✓ Knowing that there is no less expensive way of “producing” animal protein and micro nutrients
 - ✓ Building on the existing strength of fisheries rather than attempting to replace existing livelihoods.

Recommendations



- Fostering transparency and legitimacy in decision making process
 - participation of the different interest groups of water uses
 - adequate information for effective communication
- Trade-off solutions require regional, basin-wide and trans-boundary approach to decision making.



Thank you!

