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Cross-border resource management in SEA – the cases of Greater Mekong Sub-region, the Heart of Borneo and Coral Triangle

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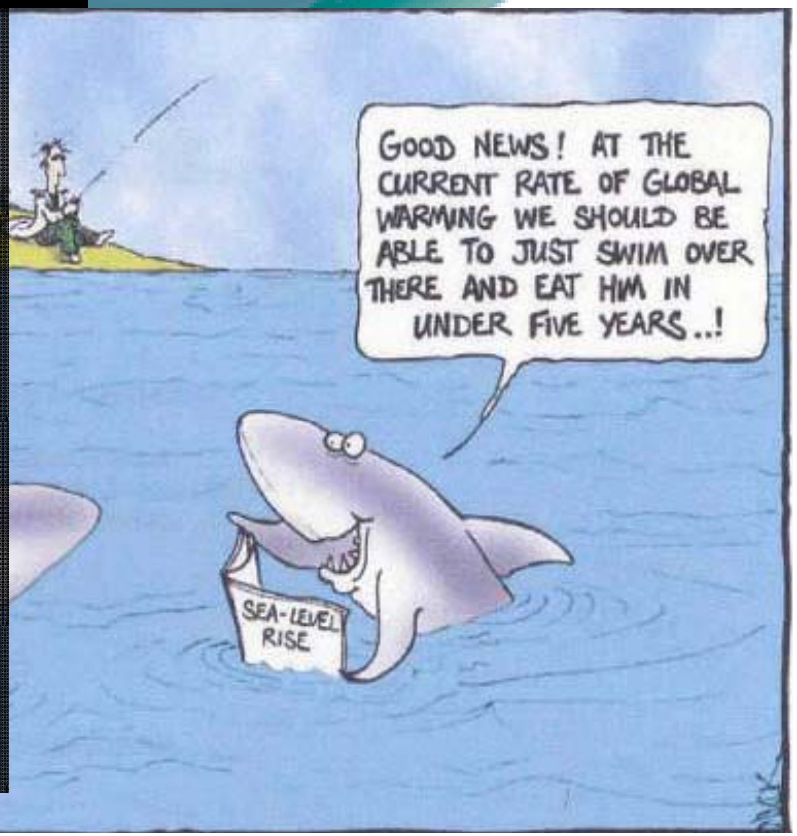
Image: Google Earth, 2009

1. Climate change in three important cross-border resource management areas of SEA

Climate change in SEA

- Sea level rise: 1m rise impacting on over 37 million people and 2% of GDP. Vietnam → 11% of its population;
- Increased intensity & frequency of floods, droughts, forest and land fires;
- Biodiversity & natural resources: risking 50% of Asia's biodiversity, 88% loss of coral reefs in Asia in the next 30 years, significant declines in fish stocks
- Impacting on infrastructure, agriculture, fisheries, tourism, health, water, etc



Climate change in Greater Mekong Sub-region (GMS)

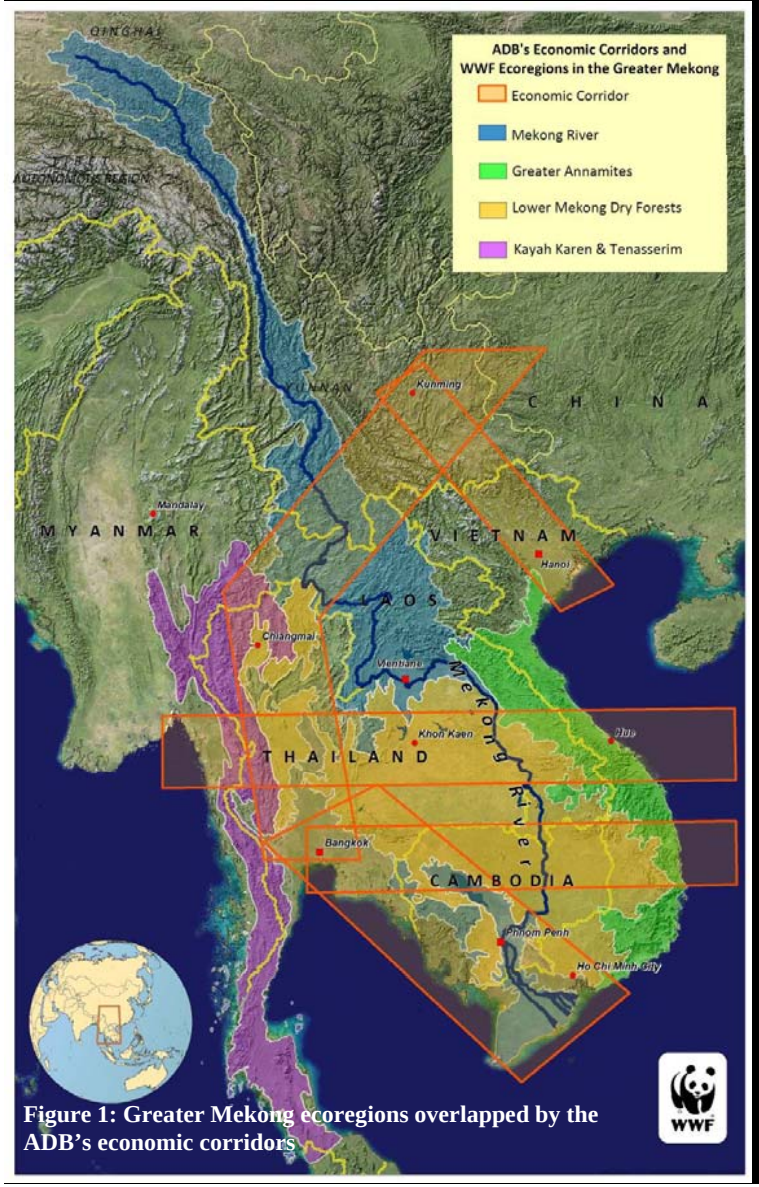


Figure 1: Greater Mekong ecoregions overlapped by the ADB's economic corridors

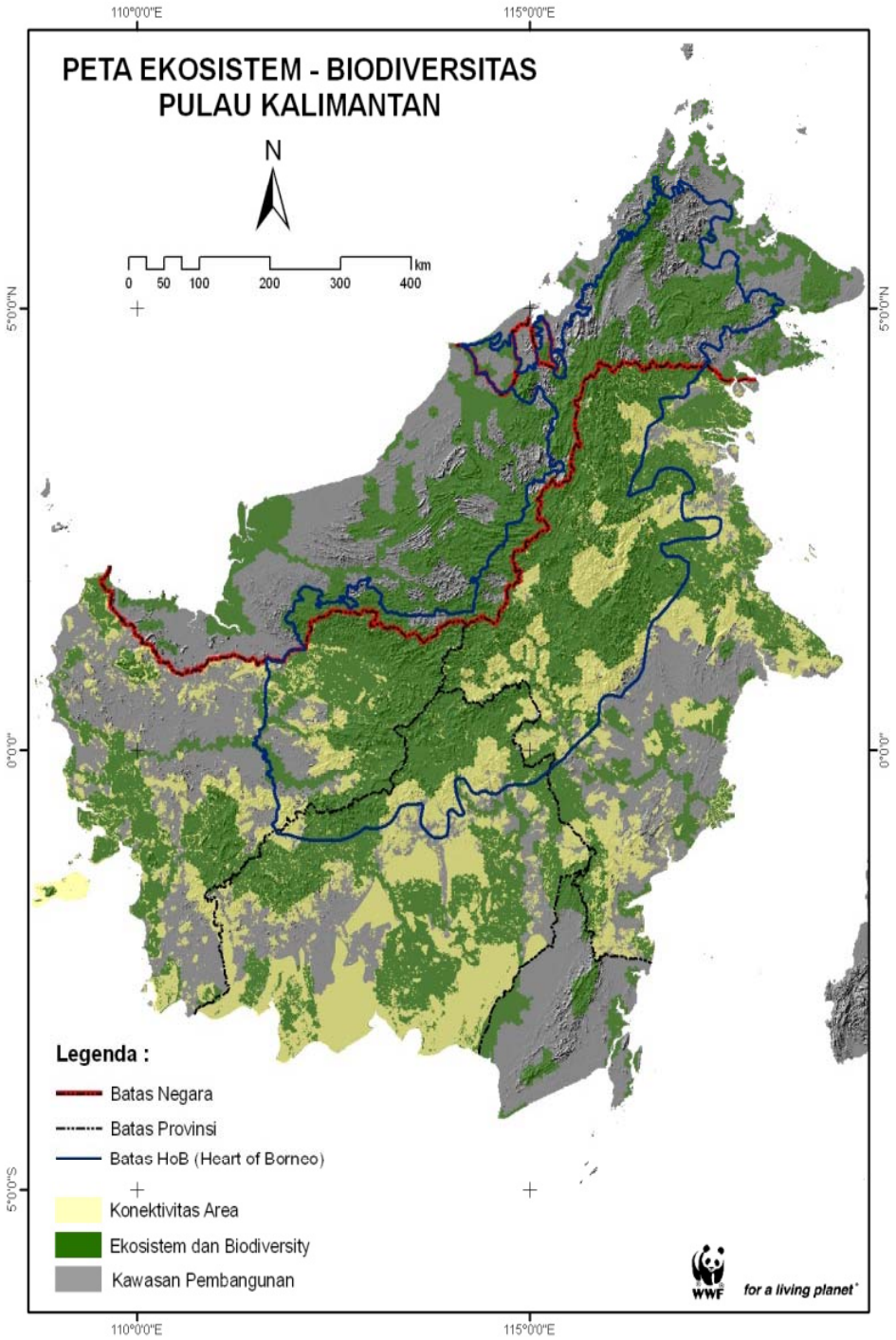
- GMS: 300 million people, rich natural resources, valuable habitats in Cambodia, Lao PDR, Thailand & Vietnam;
- Continued warming & increased climate variability: floods, droughts, water shortages;
- Rising seas & salt water intrusion;
- Impacts: agriculture & fisheries productivity ↓ (food security), human-wildlife conflicts, human migration → social unrest

Source: Eastham et al. (2008), IPCC-WG-II (2007)

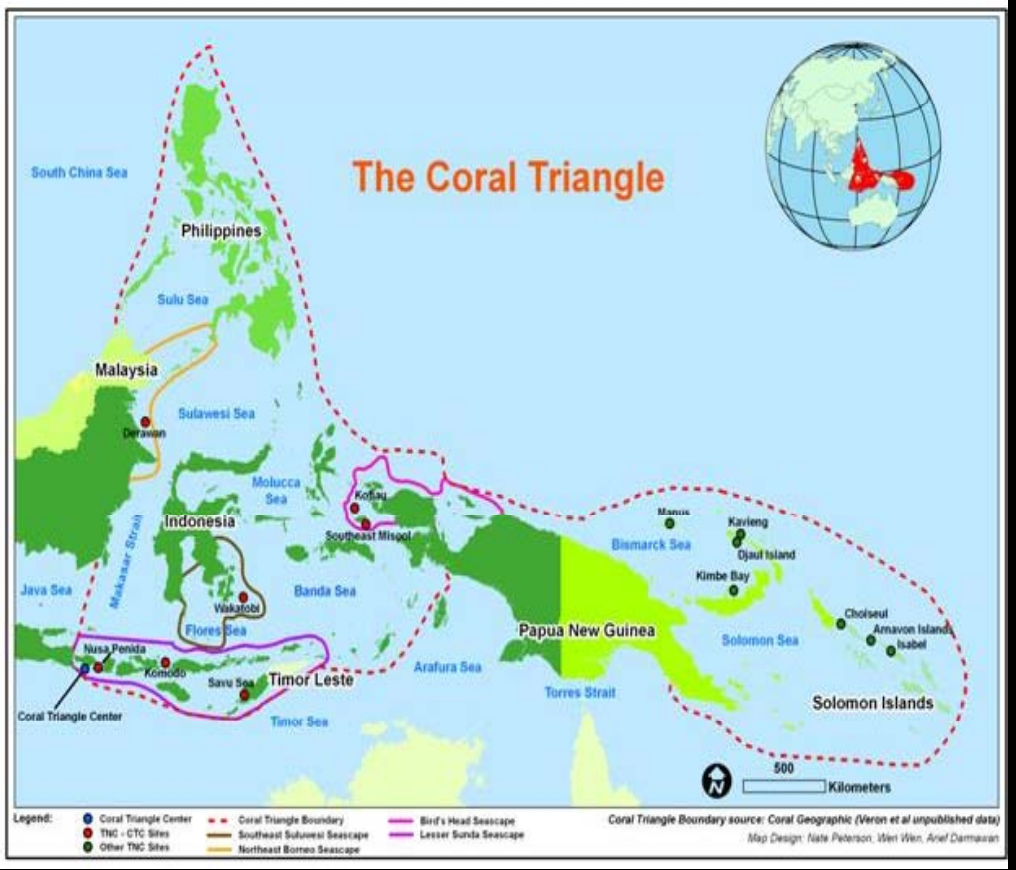
Climate change in the Heart of Borneo (HoB)

- HoB: 24 million ha rich in forest-water resources in Indonesia, Malaysia, Brunei;
- Increased incidence of droughts and fires;
- Impacts: local livelihood ↓, trans-boundary haze → costing US$9 billion & millions of people, tensions among countries

Source: Saleh et al. (2009), Hariri & Ardiansyah(2007)



Climate change in Coral Triangle (CT)

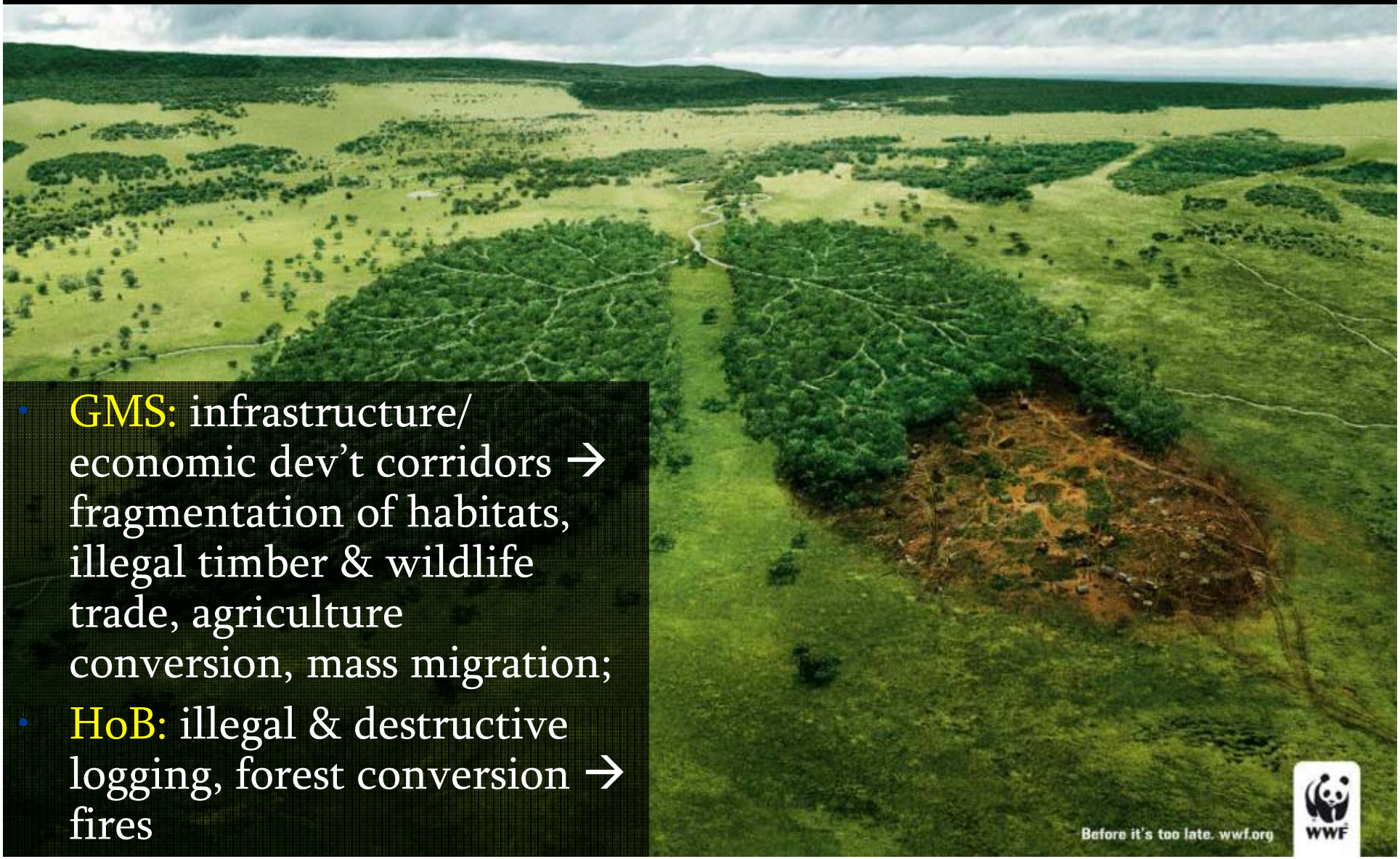


- CT: 600 million ha in Indonesia, Malaysia, Philippine, PNG, Solomon Island & Timor Leste, 30% of world's coral reef, 35% of coral reef fish, 100 million people;
- Disappearance of coral reefs: food security 80% ↓, US$10.67 billion, livelihood of millions of people;
- Impacts: competition → destructive fishing, migration of coastal people, tourism

Source: WWF & University of Queensland (2009)

2. Existing environmental degradation

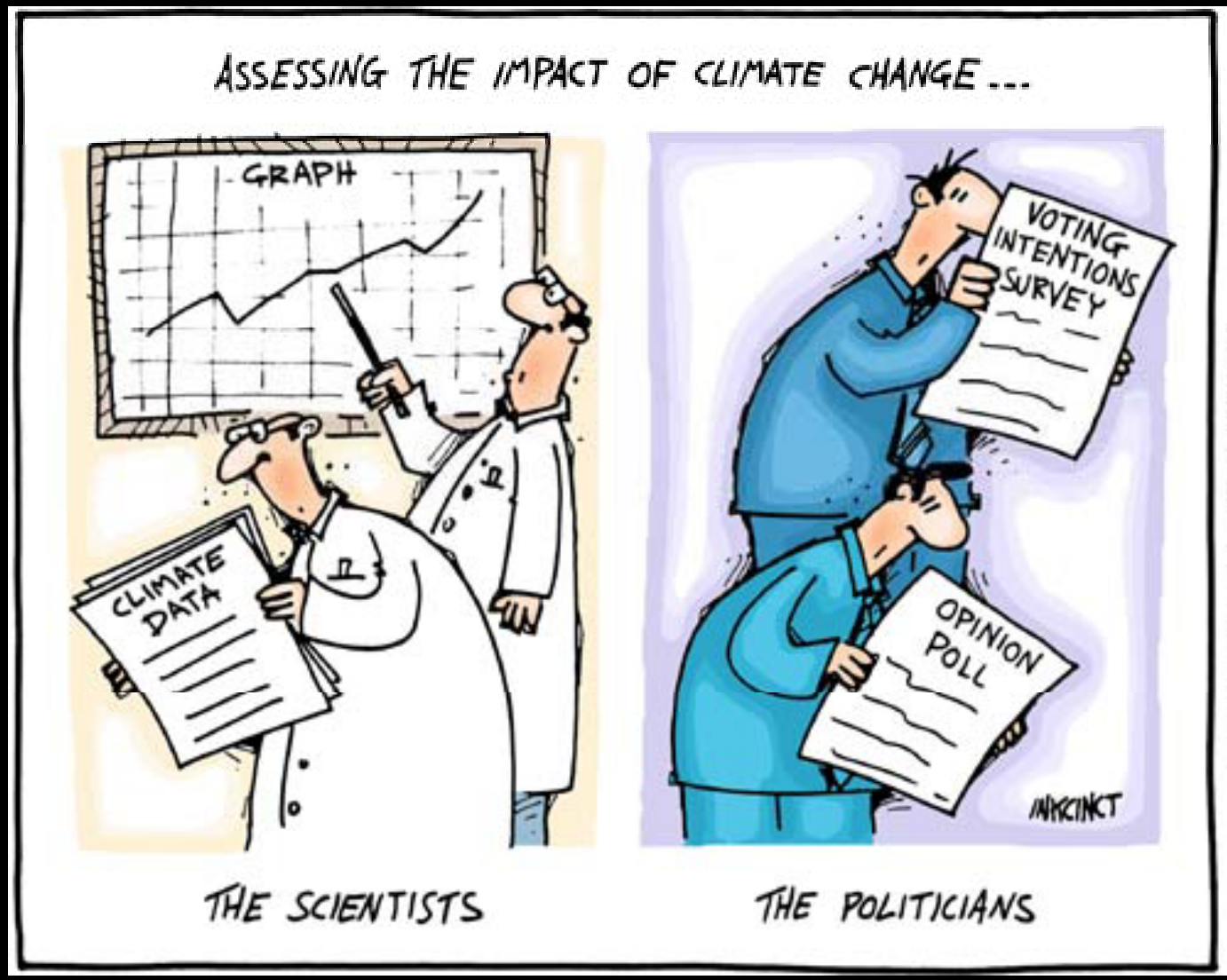
In GMS & HoB



- GMS: infrastructure/ economic dev't corridors → fragmentation of habitats, illegal timber & wildlife trade, agriculture conversion, mass migration;
- HoB: illegal & destructive logging, forest conversion → fires

In CT

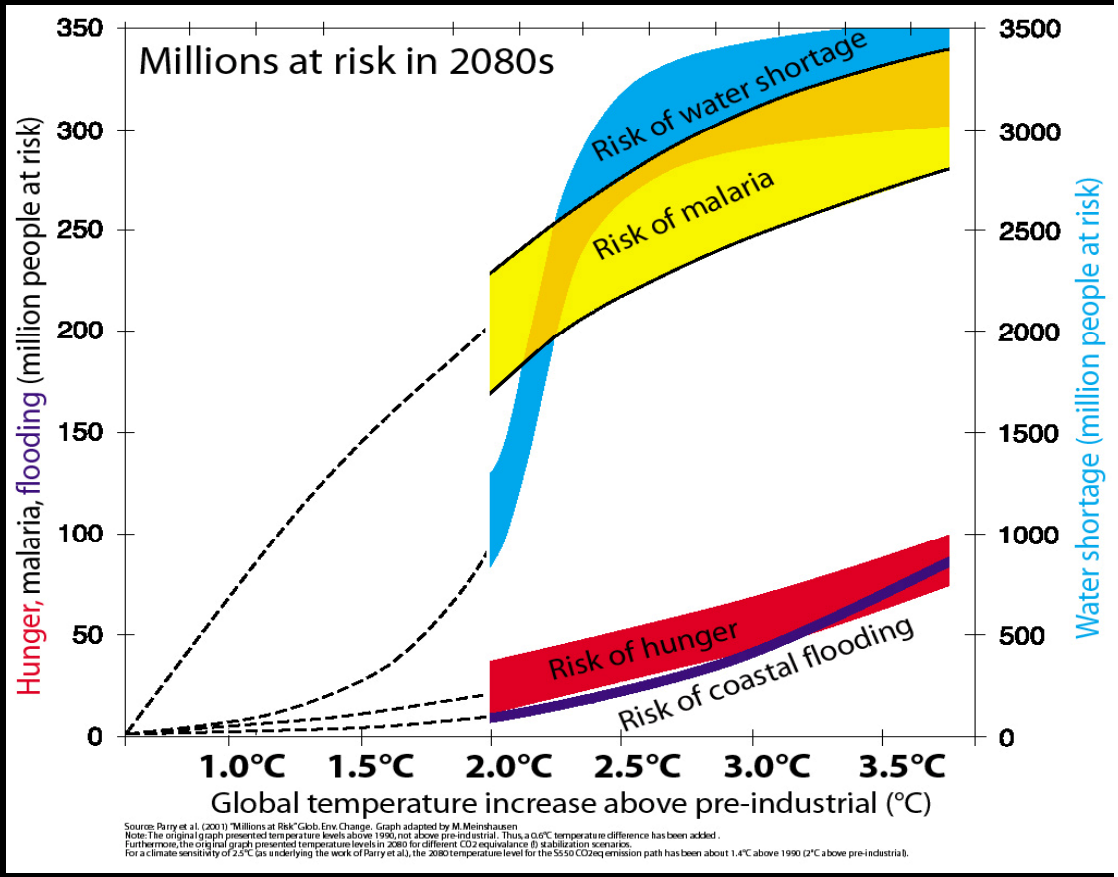
- CT: overfishing, declining water quality, resource extraction, unsustainable coastal development



3. Mainstreaming climate adaptation-mitigation in the development agenda

A stronger global climate agreement

- Below 2°C: SEA countries push for this, keep below this level (a role to change 'the climate game')→ greater reduction from developed countries (25-40% by 2020);
- Building blocks: esp. stronger in pushing adaptation, financing & tech transfer



Global temperature increase above pre-industrial (°C) (*Source: Perry et al., 2001, "Millions at Risk" Global Environmental Challenge*)

Regional agreements & actions (i)

Image: WWF/Noy Promsouvanh

- Ideal: climate-smart development strategies combining natural resources/ecosystems, economy and social dimensions;
- GMS: proposed 1st regional climate adaptation agreement → climate resilient & low carbon future, incorporation in dev't planning, binding by 2011;
- Biodiversity Conservation Corridor (BCI): enhancing climate change resilience & ecosystem protection efforts vis as vis economic stimulus to the rural poor → renewable & clean energy, efficient transport, sustainable agriculture

Regional agreements & actions (ii)

- HoB: "Three countries, One conseravtion vision" in 2007 → trans-boundary management, protected areas management, sustainable natural resource management, ecotourism development & capacity building;
- Program plans & actions: adaptation-mitigation of climate change, watershed management, PES, benefit-sharing

Regional agreements & actions (iii)

Image: WOC & CTI-Summit (2009)

- CT: network of marine protected areas, sustainable fisheries, endangered species conservation; WOC (World Ocean Conference) → Manado Ocean Declaration: incorporating oceans in climate negotiation
- Program plans & actions: climate adaptation for coastal communities and key sectors (e.g, fisheries, tourism)

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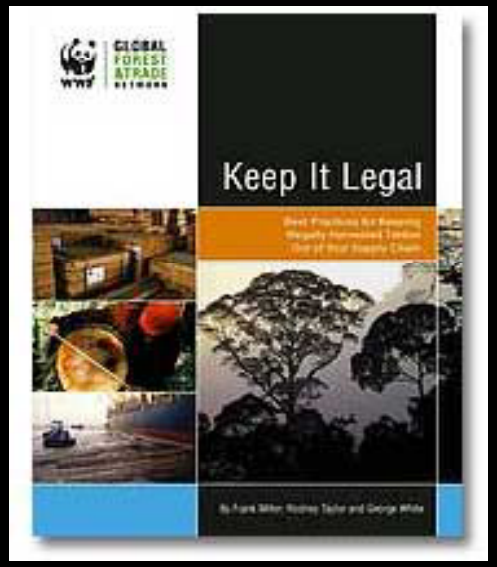
4. Identifying other "real" actors & getting them engaged

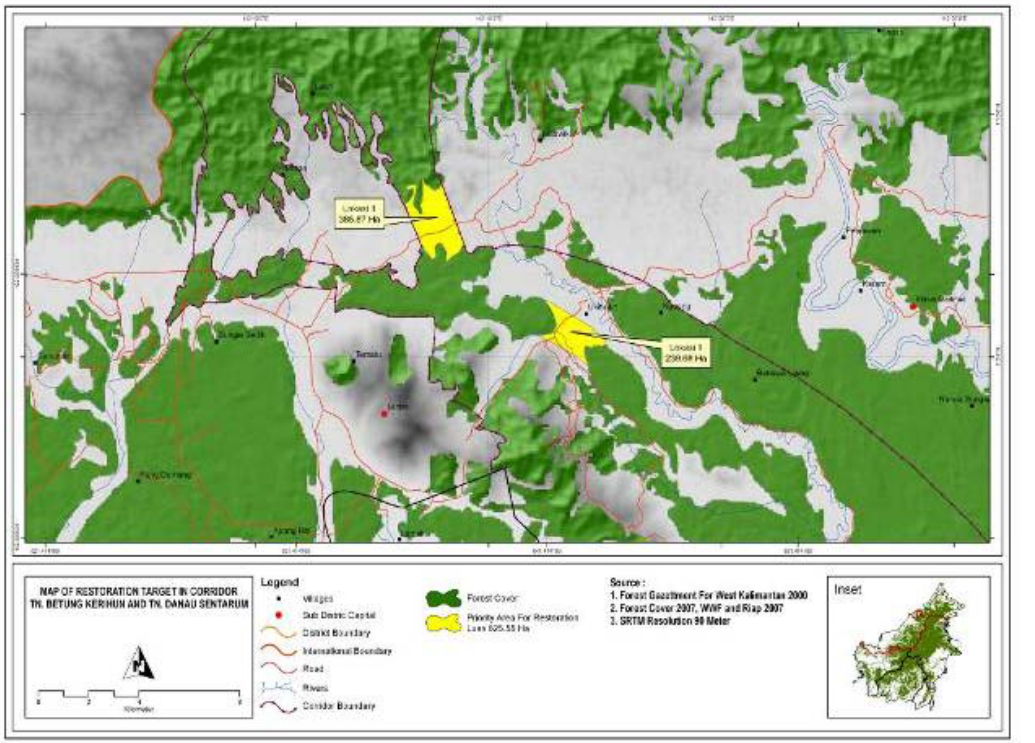
Non-state actors' involvement: business sector



RSPO
Roundtable on Sustainable Palm Oil

- Roundtable on Sustainable Palm Oil (RSPO), sustainable timber & seafood certification, & proper land use: lessening the pressure to ecosystems and reducing conflicts with communities
- Sustainable financing: reputational risks management (CSR), innovative funding mechanism (e.g. trust fund, biodiversity rights, PES)

Non-state actors' involvement: local communities



- Nexus of rural renewable energy, forest conservation & poverty alleviation: provision of energy → reducing threats to forest → economic development → increased adaptive capacity

Image: WWF-Indonesia

Non-state actors' involvement: the public

- Stories from the field: climate witness
- Public outreaching & education: urban & rural audience, schools, practical environmental solutions, media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