Greening growth - investing in forest environmental services

Rae Kwon Chung
Director, ESDD, UNESCAP
chung1@un.org

Ecological Status of Global Economy

- Deepening Ecological Deficit
  - Footprint is surpassing Biocapacity

	Biocapacity	Ecological Footprint	Ecological Deficit
A & P	1.0	1.5	-0.5
World	1.8	2.2	-0.4

Ecological efficiency to continue economic growth

- 1 billion poor living under 1 dollar a day, 2/3 of world poor live in Asia & Pacific
- To continue economic growth necessary to meet basic needs of the poor, without compromising limited ecological carrying capacity,
- Then we have to improve Ecological Efficiency of our economic growth

Green Growth

What is ecological efficiency?

- Minimizing Ecological Costs: Eco-Efficiency
- Ecological Costs =

  Resource Depletion + Pollution Impact
- Current paradigm: Economic Efficiency
- But Market Price $<$ Ecological Price
- Economic Efficiency $\neq$ Ecological Efficiency
- Result - abuse of ecological resources

Losses of natural forests ..

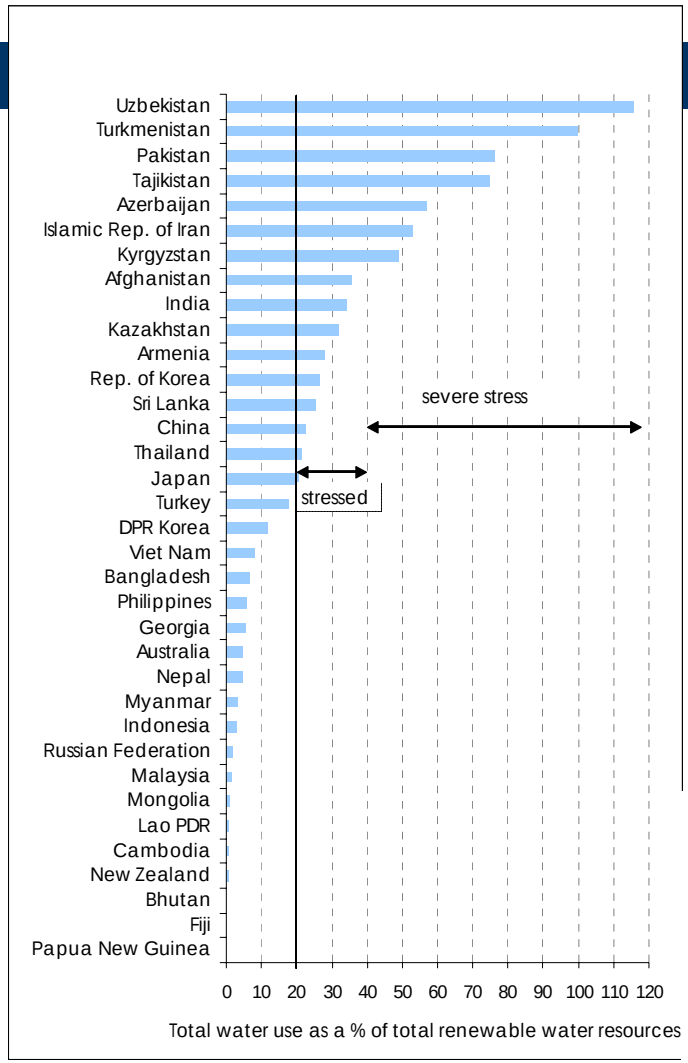
- Slowed/reversed A-P deforestation rates but continuing losses of natural forests in most countries
- Result – increasing risk (climate change), diminishing flow of critical environmental services
- Driving forces – energy and agriculture policy to meet demand for goods (explicit in markets) – what about demand for env. services?

Demand for forest env. services

(International) carbon markets growing – but meeting local/national demand is critical ..

- > 600 million without safe drinking water & >1.9 billion without sanitation
- > 800 million without electricity or access to clean energy
- Proportion of irrigated areas expanding 25 x faster than the rest of the world.
- Agricultural production growth 2x global rate
- Industrial production growth – ESCAP developing countries - 1.7 x global rate
- Exports from developing countries – 2x global rate

Demand for water and ecosystem stress



A-P freshwater available:
3,920m^3/person/yr
vs.
South America 38,300m^3/person/yr

Water exploitation index – indicator of sustainability of withdrawals and resulting water and ecosystem stress

Greener growth - missed opportunities

Natural capital investments - missed opportunities

- Free-riding - cost of provision of environmental services not met by all beneficiaries
- Governments not ready to take advantage of resource flows available through existing and future carbon & biodiversity markets
- "Demanders" and "suppliers" not linked in fiscal policy - Private sector investment in ES limited

Greener growth – missed opportunities

Barriers/constraints

- governments - political will, governance, capacity, information, lack of financing mechanisms, non-supportive policies in agricultural and energy sectors
- other investors - Perception of high risk, lack of awareness, lack of incentives (supportive policy)

Increase investment in natural forests – how ?

- Natural forests need to be made more competitive – maximise non-use values
- Make the value of environmental services explicit in national economies - *payments for environmental services (PES)*
- Expand definition of “investors”- all “demanders” of environmental services eg. hydropower and water utilities, water and electricity users, private sector – beverage and bottled water producers

Examples of PES

- Americas - Costa Rica national PES scheme – reduced deforestation rates at 1/10th cost, high private sector participation; Mexico, other countries
- Asia – behind but increasing interest
- China – largest national PES scheme in the world
- Beijing city and Miyun county (main water source) cooperate to facilitate investments in environmental services
- Lombok, Indonesia – local conflict over water use prompts payments for environmental services
- Some watershed-level schemes –see work of ICRAF/RUPES, international NGOs

Capture international demand for ES to finance positive land use (and social) change (SFM)

- Explicit policies and legislation re: ES
- Synergy between ES policy and national development plans (not enough attention)
- Develop ES finance strategy - based on both international and local demand for ES
- National mechanisms for payments for environmental services needed - most forest area is public/community owned
- Institutional and legal frameworks for monitoring etc.
- Empowerment of local governments

Supportive actions

- Engage ministries of finance - taxation & FDI policy – incentivize action by national/local demanders of environmental services – particularly hydropower and water utilities, local governments
- Reduce negative perceptions of investment risk – strong policy support, institutional transparency, risk management, governance
- Resolve/improve land tenure and user rights
- Empowerment and accountability of local communities and governments – fiscal policy to support role as buyers and sellers of env. services

Green growth

ESCAP's "green growth" policy focus

- synergize economic growth & environmental protection
- develop more eco-efficient economies

Adopted at the 5th Ministerial Conference on Environment and Development for Asia and the Pacific, 2005 – 52 countries

ESCAP's tracks to green growth

1. Green tax and budget reform (internalize env costs)
2. Sustainable infrastructure development
3. Sustainable consumption and production - Demand side management (e.g. water and energy pricing) to improve EE of consumption pattern
4. Greening of business

Meaning of Green Tax Reform

- Key Message: EE can be applied without additional costs. Revenue Neutrality:
- Without increasing tax but

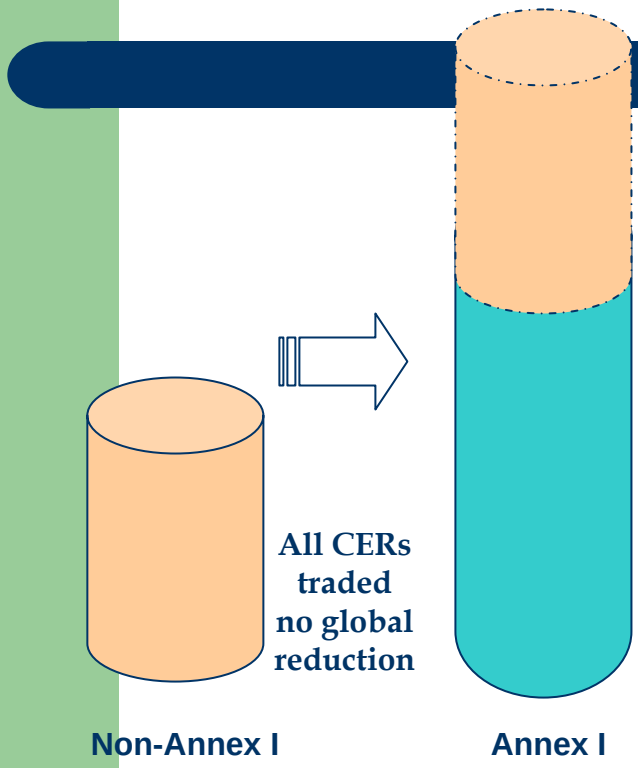
  by shifting tax base from Income to pollution or resource use
- We can change our growth pattern
- It is a matter of software of a society
- Income regressiveness, competitiveness: can be managed by design of Green Tax.

Climate change and avoided deforestation

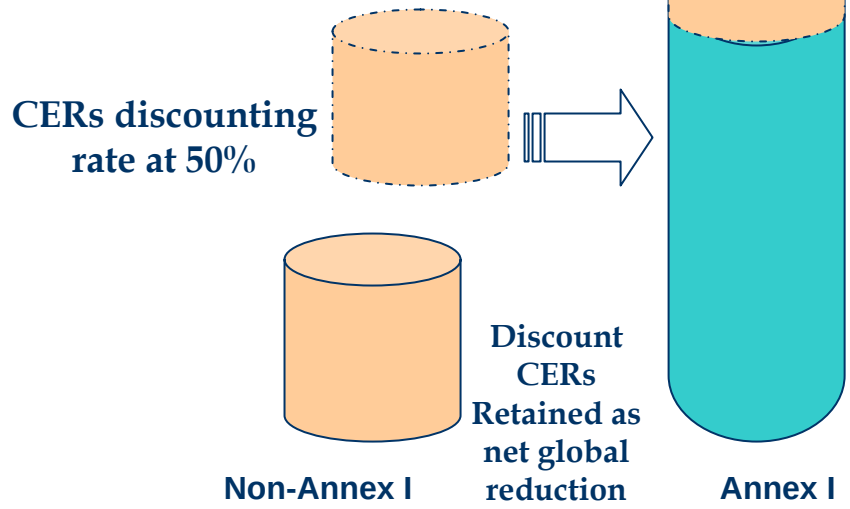
- As oil price goes up and the demand for environmental services increases, climate change action is compatible with economic growth objectives
- REDD –technical and political issues to be resolved
- Increased availability of CERs from REDD - need to increase Annex 1 commitment to emissions reduction to maintain price stability
- Other measures to maintain price stability – proposal for CER discounting scheme
- Unilateral and Programmatic CDM already approved – ready for government action

CDM Projects linked with CERs Discounting Scheme

No CER Discount



With CER Discount



No Global Reduction

Net Global Reduction

ESCAP services

- Regional policy dialogue, information/experience sharing
- Regional cooperation
- Transboundary cooperation
- Advisory services (direct country support on request – free)
- Technical cooperation activity
  - small amounts of funding on country request
  - project development based on needs assessment