



# Investing in Natural Capital: Promoting Green Growth & Green Economy

*Regional Policy Dialogue on the Economics of Ecosystems and Biodiversity:  
Transforming Policies into Actions  
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## Background

# Changing development context

## ... a changing outlook

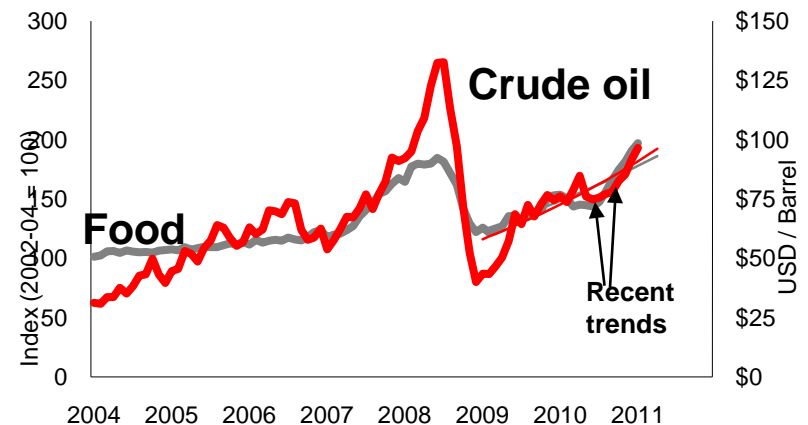
- High & volatile prices, inflation - food, fuel & commodities
- Economic uncertainty
- Poverty reduction slowing
- Threats of climate change
- Achievement of MDG 1 in danger

# Poverty reduction jeopardized...

**2011** → **42M** likely to have fallen into poverty

**2010** → **19M** affected by rising prices (oil/energy/resource/food)

*FAO food price index and Brent crude oil price, January 2004 to December 2010*



# Signs of resource constraints ..

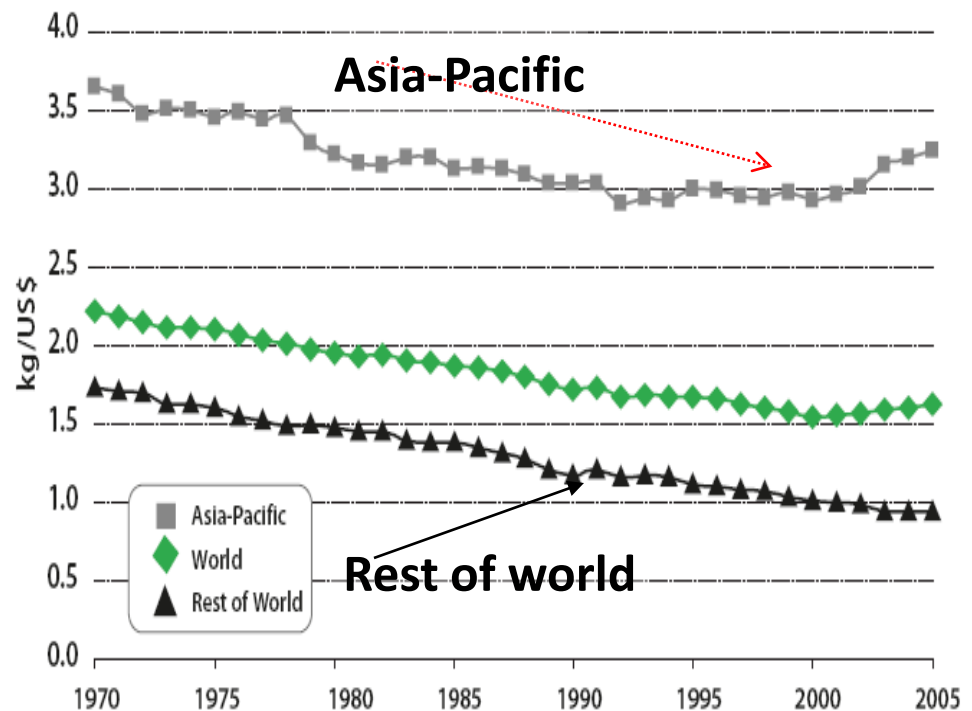
- ❑ Oil - Production peak **already** passed in 2006 for conventional oil sources
- ❑ Metals - iron, cobalt, platinum, palladium may be close to exhaustion in 40 years
- ❑ "Peak water", "Peak phosphorus" ?
- ❑ Converging resource uses
- ❑ **Ecosystem services** - 60% degraded or used unsustainably - fresh water, capture fisheries, air & water purification, climate regulation\*

\* - Millennium Ecosystems Assessment

# UNSUSTAINABLE RESOURCE\* USE PATTERNS

- A-P uses > 3 x resources to produce \$1 of GDP, compared to the rest of the world
- 60% of global resource use to produce 30% of global GDP

## Domestic material consumption intensity



Source: CSIRO and UNEP Asia Pacific Material Flows database

- \* biomass, fossil fuels, metal ores, industrial & construction minerals

# CONFLICTS, TRADEOFFS and TENSIONS

- Resource constraints *BUT STILL* increasing throughputs
- Increased costs to the economy and people
- Vulnerability to resource and climate risks
- Jobless growth (  
>>The most vulnerable people bear the highest burdens

## ROOT CAUSE - MARKET FAILURES

Eg. Climate negative investments still profitable, degrading watersheds in water-stressed countries, etc.

- Price gaps - Market "Price" vs. Ecological "Price"
- Time gaps - Time between initial (environmental) investment and economic benefit

# Green Growth: System change

- Economies to be recalibrated to better fit to a new economic reality
  - Tradeoffs >>>> synergies.
  - Ecological crisis >>>> economic opportunity
- By re-designing invisible & visible economic infrastructure - focus on eco-efficiency (EE)
- To arrive at Green Economy where investment in renewable energies and other improvements in eco-efficiency can generate profit, employment, growth



# Recalibrating the “invisible” structure of the economy

- Create a virtuous cycle – policy framework that acts as a **green growth engine** - shift investments to resource-savings and job creation
- **Secure a double dividend** – green tax and budget reform key to changing investment flows
  - Increase taxes/prices/costs on the “bads” – pollution and wasteful resource use
  - Reduce taxes on the “goods” – employment, capital gains
  - Subsidize the “goods” not the “bads”
  - **Recycle** revenues from taxes to mitigate regressive impacts and towards **environmentally sustainable investments**

..Green growth policy framework needed to maintain investment momentum

# Economic valuation > strategy > policy

- Valuation – facilitates dialogue and consensus on the need to protect a particular site or ecosystem type
- Opportunity costs critical for deciding policy framework for protection – especially for developing countries
- Policy framework - what mix of regulatory requirements and incentives needed ? – Who? Where ?
  
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# Economic valuation > strategy > policy

- Valuation – facilitates dialogue and consensus on the need to protect a particular site or ecosystem type - securing political and stakeholder commitment
- Opportunity costs critical for deciding policy framework for protection – especially for developing countries
- Strategy – to recognize opportunity costs
- Policy framework - what mix of regulatory requirements and incentives needed ? – Who? Where ?

# Economic valuation > strategy > policy

## Designing a strategy

- High ES value + High opportunity cost >> Strong incentives/compensation + strong regulation
- High ES value + Low opportunity cost >> Regulation (and/or Incentives, depending on social factors)
- High ES value + Moderate opportunity cost >> Regulation + Incentives

## Developing policy responses

- Appropriate mix of regulation and incentives ..
- Regulations – (more) stringent EIA + impact mitigation requirements; bans, establishing protected areas
- Incentives – PES (mandatory/voluntary), tax breaks, tax incentives etc.

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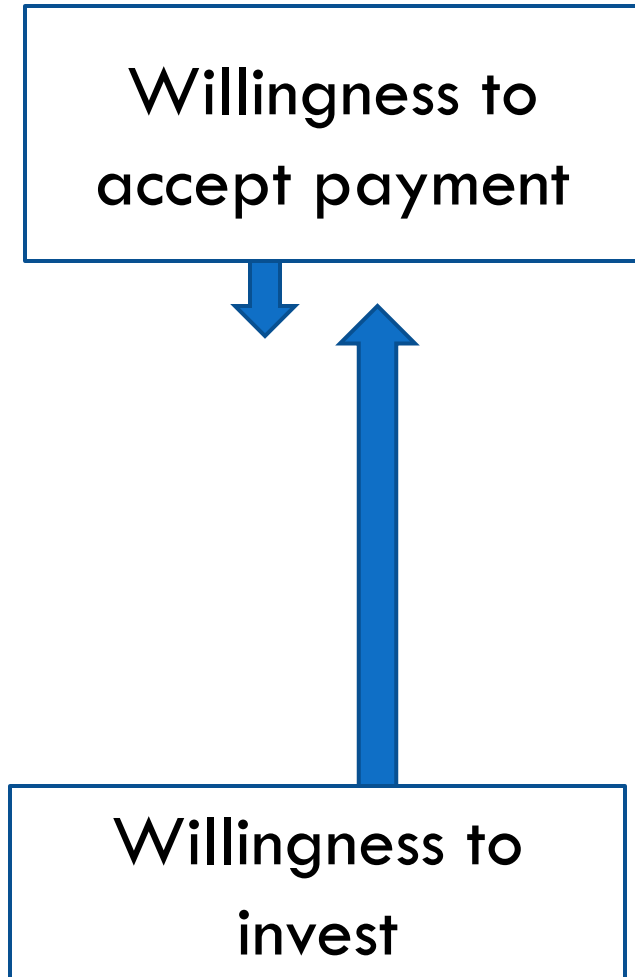


# ***Incentives and investment in natural capital***

- Investments don't show immediate economic benefit
- Buyers/investors do not want to pay as much as is needed to change behaviour resource use patterns

*The right market and regulatory conditions, and incentives are needed to close “price” and “time” gaps*

# Closing the gaps – price gap



Reduce opportunity costs of good management

- More incentives for good management

Regulation

- mandatory payments - ES-intensive sectors
- standard setting re: sustainable ES use
- banning unsustainable ES use

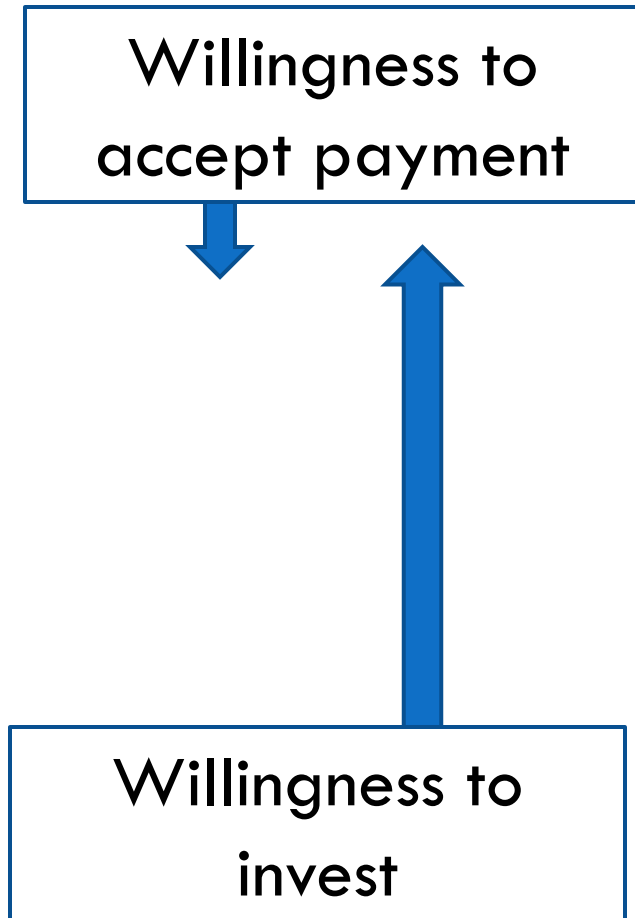
Government institutional support

- enforcement of contracts, conflict resolution
- intermediary function – negotiation and promotion

Government legislative support

- recognition of ES in law, intermediaries, spell out..

# Closing the gaps – Financing to close the “time gap”



*Temporary/adaptable policy measures to compensate for financial outlays (buyer & seller) or provide incentives*

- Green tax and budget reform with recycling of revenues
- Tax breaks/tax incentives
- In kind incentives (seller)



# Policy support / enabling conditions

- Recognition of ecosystem services in law
- Giving users the **legal right** to manage non-private lands (especially state lands)
- Recognition of intermediary institutions as joint managers (stakeholder groups)
- Flexibility for direct beneficiaries to recover costs from users if needed (water and energy price regulatory framework affected)
- **Land use planning**, ideally based on ecosystem service functions - not just traditional
- To facilitate cooperation across administrative boundaries

# Investment in natural capital is critical for effective economic cooperation

- Avoid the race to the bottom (lose-lose vs. win-win outcomes)
- Ensure the sustainability of key economic sectors that depend on ES
- Capture the value that can be generated by boosting ES
- Shared problems, vulnerabilities and ecosystems
- AND **shared opportunities**

# Investments in Natural Capital

4 key messages

1.

The demand for the services  
provided  
by natural capital is growing  
*... turn crisis into opportunity*

# Growing demand for Ecosystem Services

- Shared concern over resource crisis and changing economic reality
  - ▣ Growing resource uncertainty, risks and constraints,
  - ▣ Awareness of the link natural capital / services
  
- More economic value captured by commercial benefits (e.g. bottled water, ecotourism etc.)
  - **To mitigate risk** - if there is a threat to a commercial interest - e.g. water utility, ecotourism operations
  - **To avoid/mitigate conflict** - e.g. where upstream forest use is threatening downstream water supply
  - **To reduce long-term costs** - e.g. from soil erosion

>>> New financial flows - Carbon sequestration, etc.

## Increasing Willingness to Pay

- People and enterprises do not mind paying (under the right conditions)
- Willingness to invest often higher than expected
- Philippines study of 25 gov't & private companies >> 84 % convinced of the business case
- Higher demand for nature (quality of life, recreational opportunities, etc.) as incomes rises
- More constraints on alternative interventions, e.g. megaproject (economic, social and environmental)

2.

**Use ecosystem service concepts  
to identify  
potential investors & partners  
and the specific policy support  
needed**

# Who are potential investors (buyers) ?

- All beneficiaries can be involved as investors / buyers
- Can be either “direct” beneficiaries, or “indirect” beneficiaries
- Each requires different kinds of payment mechanisms and policy support to capture investments





# Expanding the investor base (ex. forest ecosystem)

## *Traditional management for timber production*

- Private sector (plantations)
- Local governments
- Local communities

## *Management for service provision*

- Ecotourism operators
- Local governments
- Water utilities
- Hydropower companies
- Water users
- Energy users
- Beverage producers
- Agro-industries
- Local communities
- Farmers

# Expanding Beneficiaries...

Forest ecosystem service	Direct beneficiaries/users	Indirect beneficiaries/users
Hydrological services	<ul style="list-style-type: none"> <li>• Water utilities</li> <li>• Hydropower producers</li> </ul>	<ul style="list-style-type: none"> <li>• Intensive water users – all economic sectors and households</li> <li>• Hydropower users – all economic sectors and households</li> </ul>
Scenic/landscape beauty	<ul style="list-style-type: none"> <li>• Enterprises providing eco-tourism and nature-based tourism-related services</li> </ul>	<ul style="list-style-type: none"> <li>• Tourists</li> </ul>
Biodiversity support	<ul style="list-style-type: none"> <li>• Bioprospecting interests</li> <li>• International conservation interests</li> <li>• Enterprises providing eco-tourism and nature-based tourism-related services</li> </ul>	<ul style="list-style-type: none"> <li>• Drug purchasers</li> <li>• Individuals</li> <li>• Tourists</li> </ul>
Climate regulation services	<ul style="list-style-type: none"> <li>• Carbon market investors/brokers/intermediaries</li> <li>• Greenhouse gas emitters</li> <li>• Energy-intensive industries</li> </ul>	<ul style="list-style-type: none"> <li>• Carbon offset purchasers</li> <li>• Non-hydropower, non-renewable energy users in all sectors</li> <li>• Global community</li> </ul>

# Policy support is needed

Modality	Governments	Companies and other institutions (Direct beneficiaries)	Consumers (Indirect beneficiaries)
Investments	<ul style="list-style-type: none"> <li>• Direct budget allocations</li> <li>• Establishment of protected areas</li> <li>• Community forest arrangements and financial incentives</li> </ul>	<ul style="list-style-type: none"> <li>• Land purchase</li> <li>• PES financing</li> <li>• Carbon offsets</li> <li>• Co-management approaches with communities</li> <li>• Eco-efficient production and consumption (lower environmental impact)</li> </ul>	<ul style="list-style-type: none"> <li>• Carbon offsets</li> <li>• Green fees (water, electricity) – through PES arrangements</li> <li>• Price premiums for natural products or nature-based products (for example, coffee)</li> </ul>
Policy support required from governments	--	<ul style="list-style-type: none"> <li>• Tax breaks</li> <li>• Establishment of payments for ecosystem services policy and mechanisms</li> <li>• Establishment of biodiversity banks</li> <li>• Securitization (environment bonds)</li> <li>• Green tax and budget reform</li> </ul>	<ul style="list-style-type: none"> <li>• Tax breaks</li> <li>• Eco-labelling and other information policy tools</li> <li>• Support for establishment of payments for ecosystem services policy and mechanisms</li> <li>• Green tax and budget reform</li> </ul>



# Payment based on beneficiaries' interest

- Focus on *value capture* rather than *cost recovery*...
- Site- and situation-specific
- Valuation (as in TEEB) can help reveal demand

Examples include

- Da Nhim HP plant in Viet Nam - to lose \$3.75 million per year in added operating and plant costs if 45,000 ha of pine forests in the watershed converted to agricultural use (ARBCP, VN)
- Water users in Ho Chi Minh city willing to pay
- Philippines - community support for marine park

# Potential for Innovative Partnership

- Coca Cola partners with USAID

***“We have created a unique partnership ...”***

- *In conjunction with local USAID Missions and our system partners (foundations and bottling facilities) with support from the Global Environment and Technology Foundation (GETF), the “Water and Development Alliance” (WADA) contributes to protecting and improving the sustainability of watersheds, increasing access to water supply and sanitation services for the world's poor, and enhancing productive uses of water. With a combined investment of \$20.4 million since 2005, WADA is having a positive impact on the lives of people and the health of ecosystems in 21 countries.”*

*The Coca-Cola Company*

# Partnership with USAID

We have created a unique partnership with the U.S. Agency for International Development (USAID) to address community water needs in developing countries around the world. In conjunction with local USAID Missions and our system partners (foundations and bottling facilities), with support from the Global Environment and Technology Foundation (GETF), the "Water and Development Alliance" (WADA) contributes to protecting and improving the sustainability of watersheds, increasing access to water supply and sanitation services for the world's poor, and enhancing productive uses of water. With a combined investment of \$20.4 million since 2005, WADA is having a positive impact on the lives of people and the health of ecosystems in 21 countries in Africa, Asia, Latin America and the Middle East.



3.

Natural capital investments for green  
growth need  
specific institutional support

- *How to make it happen?*  
*Create practical mechanisms to channel  
investments*

# Capturing value..

- Mandatory payments for large/intensive water users
- Payments by commercial entity (hydropower plants, water utilities) to relate to production inputs (e.g. water - per m<sup>3</sup> charge)
- Making it easy to pay: Water/electricity users pay through utility bill - green fee, internet
- Institutional support for establishment
- Transparency in the use of funds
- Conflict resolution + redress mechanisms



4.

Spatial (land use) planning and ecosystem service investments must be intimately linked..

# Spatially targeted protection / investments ...

- Areas of highest ecosystem service values need protection
  - ▣ protection / compensation by public / non gov't. investors
  - ▣ Payments & investments can be targeted to areas of highest ecosystem service values - where there is demand
- Establishment of biodiversity corridors
- Complement protected areas system, ex. create new category of protection, e.g. buffer zones)
- Forest cover goals (or other ecosystem management goals) to share the objective, identify priority areas and monitor implementation

# Conclusions and recommendations ...

- Investment in natural capital can be encouraged, if
  - ▣ Investors/ buyers are clearly identified
  - ▣ Specific strategies are put in place to close price and time gaps
  - ▣ Spatial planning is linked
  - ▣ Institutional support is provided

## Regional cooperation

- ▣ Focus on one or two key economic sectors (Tourism ?)
- ▣ Link buyers/demand to investment in shared high-value ecosystems - common policies
- ▣ Provide specific institutional support to manage

# Thank you for your attention

