

# International Bank for Environmental Settlements

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# 1995 - Introduction of IBES & Carbon Market

- 1995 - Key Note speech World Bank Annual Meetings Washington DC
- Proposed Emission Limits & creation of a Carbon Market to implement them
- Proposed creation of an IBES to administer carbon market
  - > & other financial instruments for sustainable development

# IBES

- ◉ A Global Financial Institution

Updating Bretton Woods for the first time since WWII

- ◉ Objectives

- > Create economic value from ecosystems while ensuring sustainable use
- > Satisfy basic needs & overcome wealth gap between North and South
- > Self - funded and profitable for institutional sustainability

# 1997 – UN Kyoto Protocol

- ◉ 1997 – UN Kyoto Protocol signed by 163 nations
- ◉ Carbon Market - key feature
- ◉ 2005 - Kyoto Protocol & its Carbon Market become international law
- ◉ 2006 - US\$ 30 billion traded in EUTS carbon market
- ◉ 2006 - US\$8 billion CDM projects in developing nations

# IBES and Environmental Markets

- The Carbon Market is an **'environmental market'** that **satisfies all IBES goals**
- The Carbon Market (i) supports sustainable use of the environment (ii) in a self - funded manner and (iii) favors poor nations (CDM)
- The ecosystem services: maintain atmospheric concentration of gases that regulate global climate

# IBES

## for Environmental Services

- ◉ In addition to carbon emissions control, IBES was originally proposed for a wide range of global environmental services derived from
  - > Watersheds
  - > Forests
  - > Water bodies
  - > Global Spectrum
  - > Biodiversity
  - > Global Indigenous Knowledge

# IBES

## A Global Investment Bank

- ◉ IBES - Self Funded and profitable, therefore economically sustainable
- ◉ IBES requires different Financial Market Instruments for very different Environmental Services (such as carbon & watersheds)

# IBES can benefit Poor Nations

- ◉ IBES can facilitate commercializing national assets while conserving them – as mortgages do for homes mortgages, Costa Rica's example
- ◉ Bundles of national assets can be “saved” “loaned”, “securitized” (cf. below)
- ◉ Environmental Markets can trade securities rather than the underlying assets

# Example 1: Watersheds

- A financial market for watershed services
- Because watershed services are regional and not uniform - it requires securitization
- In 1995 IBES proposed **securitizing watersheds**
- A 'watershed services market' trades 'asset backed securities'
- The assets are 'bundles' of 'assets': the watershed services across the world: filtration, soil settlement, water provision (e.g. G. Mae & F. Mac for mortgages)
- Large financial value - filtration services alone exceed US\$ 10 trillion
- This securitization scheme was developed in several publications (Nature, 1994 and others)

# Example 2: Global Spectrum

- Financial markets based on securitizing rights to use the global spectrum
- Consistent with existing international law – markets not yet developed
- Proposed in the original IBES UNDP/UNESCO 1996 publication
- Enormous value for developing nations – hundreds of US\$ trillions

# Example 3: Biodiversity

- Example of Bio Service: Medicinal use of Biodiversity
- Asset: Indigenous People's Knowledge
- Requires development of global data base
- And market development for national licenses
- Consistent with current international law - markets not yet development

# Summary

- ◉ Developing financial instruments requires
  - (1) allocations of property rights
  - (2) investment banking (e.g. CDM)at the global level
- ◉ IBES can make this available to poor developing nations in a self - funded and profitable fashion.

# North South Gains from Trade

- ◉ Developing nations have an enormous environmental asset base that is highly desired and profitable at the global level such as (i) global spectrum, (ii) biodiversity (iii) indigenous knowledge about biodiversity use (iv) watersheds, (v) forests, several others.
- ◉ Industrial nations have more capital, developing nations are richer in the environmental account. They emit less carbon and have most of the world's biodiversity and forests. Economic models predict gains from trade. IBES can achieve these gains, while ensuring judicious use of environmental assets.

# Different markets are needed for different services

- ◉ Environmental markets should have different forms depending on the ecosystem services to be traded: e.g. cap and trade for carbon emission, for SO<sub>2</sub> and for fishing, the trading of bundles of asset backed securities for services that are regional and not uniform, such as watersheds and biodiversity.
- ◉ IBES will create different market opportunities for each type of service

# Property Rights are key

- They are essential – must be well defined before markets can trade
- Example: in the KP carbon market, they are the nation by nation “caps” – or rights to use the atmosphere
- Allocations of property rights are quite different for services that require trading securities – for example for watersheds

# Defining Property Rights is Easier for new Assets

- ◉ Since environmental assets are newly defined, it is easier to allocate property rights in these markets (e.g. carbon rights, spectrum rights) than to reallocate existing - or historically given - property rights on land or natural resources (land reform and the privatization of natural resources such as oil, are both enormously difficult)

# Environmental Markets

- ◉ Trade **public goods**
- ◉ And often **global public goods** that are **privately produced** (such as knowledge, rights to emit CO<sub>2</sub>)

# Equitable Property Rights

- ◉ Markets for Privately produced Public Goods require equitable distribution of property rights to operate efficiently (Economic Letters, 1994, book Environmental Markets: Equity and Efficiency, Columbia University Press)
- ◉ IBES will require preferential allocations of rights to poor nations – as was done in practice in the Kyoto Protocol (and in Article 4 of 1992 Climate Convention)

# IBES: Efficiency with Equity

- The IBES can replace Bretton Woods' outdated resource intensive export and growth policies and improve how we use global resources in the 21<sup>st</sup> century
- These are arguably the most important markets this century (commodities, knowledge)

# A Sustainable Future

- ◉ IBES financial markets can deliver equity with efficiency – as in the KP carbon market
- ◉ Can ensure satisfaction of basic needs
- ◉ And overcome the North – South gap
- ◉ IBES will be self funded and profitable
- ◉ While it conserves critical ecosystems that are the foundation of human life on Earth