# Addressing incentives that are harmful for biodiversity

Markus Lehmann, CBD Secretariat Regional workshop for Africa on Updating NBSAPs Economics days Addis Ababa, Ethiopia, 27 February to 1 March 2012







Secretariat of the Convention on Biological Diversity





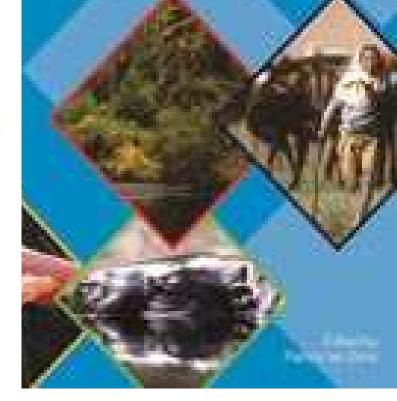


Incentive measures for the conservation



the conservation and sustainable use of biological diversity Case studies and lessons learned The Economics of osystems and Biodiversity National and International Policy Making

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#### **Target 3 of the Strategic Plan**

"By 2020, at the latest, incentives, including subsidies, harmful to biodiversity are eliminated, phased out or reformed in order to minimize or avoid negative impacts, and positive incentives for the conservation and sustainable use of biodiversity are developed and applied, consistent and in harmony with the Convention and other relevant international obligations, taking into account national socio economic conditions."

#### Aichi target 3 of the Strategic Plan

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#### What are incentives harmful for biodiversity? Concepts

#### Incentives

the opportunities and constraints that influence the behaviour of individuals and organisations in a society, deriving from a wide range of societal factors, including, but not limited to, from measures taken by governments

#### Incentive measures

"...economically and socially sound measures that act as incentives for the conservation and sustainable use of components of biological diversity." (Article 11 CBD)

A specific inducement designed and implemented to individuals to conserve biological diversity or to use its components in a sustainable manner

#### Incentives harmful for biodiversity (or 'perverse' incentives)

emanate from policies or practices that induce unsustainable behavior that is harmful to biodiversity, often as <u>unanticipated</u> (and <u>unintended</u>) side effects of policies designed to attain other objectives

### What are incentives harmful for biodiversity? Examples (exercise)



A land use policy prescribes "productive" use of land.

May discourage sustainable use practices or private conservation

A programme assigns strict protection status to wildlife living adjacent to agricultural communities.

"Shoot, shovel, and shut up" of nuisance wildlife

A rat extermination programme pays people per rat pelt handed in.

People may start farming rats! (Vann 2003)

A rural development programme provides subsidized chemical fertilizer to farmers.

May lead to fertilizer overuse and/or discourage other, more sustainable methods to improve soil quality

Government discusses introduction of a payment programme for farmers who adopt more sustainable agricultural practices.

Farmers may increase their use of harmful practices so as to enhance their eligibility for receiving payments

### What are incentives harmful for biodiversity? Types

- Environmentally harmful subsidies
  - > Two general mechanisms:
    - production subsidies reduce input costs or increase revenue;
    - consumer subsidies leading to the below-cost pricing for the use of natural resources
    - $\rightarrow$  incentives for the increased use of subsidized resources
    - $\rightarrow$  increased production and consumption levels
    - $\rightarrow$  increased environmental damage.
  - Agriculture: US\$261 billion/year in OECD countries, out of which 51% increase production (OECD 2009)
  - Fisheries: US\$ 30-34 billion/year globally, out of which at least 20 billion contribute to overcapacity (Sumaila and Pauly 2007)
  - Energy: US\$ 500 billion/year globally, 310 billion in the 20 largest non-OECD countries in 2007 (IEA 2008)
  - Water: US\$ 67 billion, out of which 50 billion harmful (Myerson and Kent 2002)

### What are incentives harmful for biodiversity? Types

- Environmentally harmful subsidies (cont.)
  - Not every subsidy is environmentally harmful
  - The size of the subsidy is not necessarily related to the size of the damage
  - Some subsidies may not be (very) cost-efficient and/or effective against their stated objectives
- Policies and laws governing resource use with harmful effects
  - Elements of land and tenure systems ('beneficial use' laws)
  - Certain trade policies/preferences
  - Sometimes environmental or resource management policies or programmes (possibly in conjunction with weak enforcement capacities)

### **Opportunities**

"While findings would vary from sector to sector and country to country, because of other resource endowments and social outcomes, there is a significant number of examples on environmentally harmful subsidies not just in OECD countries, but also in many non-OECD countries – in particular subsidies to fertilizers and irrigation water. This includes cases of successful identification and removal or reform. Further identifying and removing or mitigating the perverse effects associated with these subsidies is an important area for further work."

Third CBD workshop on incentive measures, Paris, October 2009

#### Achievements in the region

## Importance of the issue recognized in several national reports...

#### South Africa, 3rd National Report

"Prior to the change of government in 1994, fixed prices for agricultural products led to cultivation on marginal soils. Many farmers have since combined livestock enterprises with game farming with indigenous species or have switched completely to game ranches and ecotourism. However, some perverse incentives remain, such as **cheap water for** *irrigation*.

A perverse incentive that was recently introduced was the **extension of property rates to all land in the country (bar some exclusions, for example for formal protected areas**), through the Municipal Property Rates Act (6 of 2004). Previously property rates were levied only on land in urban areas, not the surrounding hinterland. Property rates are calculated based on the market value of the land, not the income currently derived from the land. Rural landowners with large tracts of natural veld now have to pay substantial property rates, **creating an incentive to develop the land so that it produces an income**. Given that loss of natural habitat is the biggest pressure on biodiversity in South Africa, **this has severe implications for biodiversity conservation**."

#### Achievements in the region

...and policy responses designed, possibly in the context of Environmental Fiscal Reform...

2006 Draft Policy Paper "A Framework for Considering Market-based Instruments to Support Environmental Fiscal Reform in South Africa"

One of its key proposals was to use the national framework for property taxes' exemptions and rebates in order to encourage stewardship and rehabilitation in priority areas.

### What to do?

"...urges Parties and other Governments to prioritize and significantly increase their efforts in actively identifying, eliminating, phasing out, or reforming, with a view to minimizing or avoiding negative impacts from, existing harmful incentives for sectors that can potentially affect biodiversity,..."

COP-10, decision X/44, paragraph 9

(emphases added)

### 1. Identification

"(...) while acknowledging that doing so requires then:

- ✓ the conduct of careful <u>analyses of available data</u> and
- enhanced <u>transparency</u>, through ongoing and transparent <u>communication mechanisms</u> on:
  - the <u>amounts and the distribution of perverse incentives</u> provided, as well as
  - of the <u>consequences</u> of doing so, including for the livelihoods of indigenous and local communities"

COP-10, decision X/44, paragraph 9

Enhancing transparency and enabling informed public debate is helpful in addressing the issue of entrenched stakeholders

### 1. Identification

- Distribution: Some subsidies may turn out to not be very effective/targeted against stated socio-economic objectives
- Energy subsidies example (from TEEB report for national and international policymakers, chapter 6)

Box 6.2: Estimated distributional impact of energy subsidies in four developing countries

- In Bolivia, the poorest 40 per cent of households receive 15% of the total benefits from fuel subsidies; the richest 60% of households get 85%.
- In Gabon, it is estimated that the richest 10% of households capture 33% of fuel subsidies, while the poorest 30% (below the poverty line) receive merely 13%.
- In Ghana, the poorest 40% of households get 23% and the richest 60% capture 77% of the benefits of fuel subsidies.
- In Ethiopia, the highest-income 20% of the population capture 44% of fuel subsidies, while the lowest-income 20% get less than 9%.

Source: Rijal 2007

### 1. Identification

"The assessment of subsidies and their effects should not just address environmentally harmful effects, but rather take a <u>multi-criteria</u>, <u>holistic approach</u>, which should also include the <u>cost-effectiveness</u> and the <u>social effects</u> of subsidies. This aim for a more comprehensive review process is useful because:

- the identification and reform or removal of ineffective and inefficient subsidies, even if not environmental harmful as such, can <u>free up</u> <u>considerable funds</u> which could be used for more pressing environmental needs;
- For subsidies that are provided to support environmentally-friendly activities, ensuring that these subsidies are targeted and cost-effective will strengthen their case in the eternal tug-of-war over scarce public resources.

Assessments also need to be <u>extended to new, proposed policies</u> in order to prevent further adverse effects on biodiversity and ecosystem services (strategic impact assessments). "

CBD Paris workshop on incentives, October 2009

#### General success factors

- 1. <u>Strong leadership and broad support coalition</u> involving key stakeholders
- 2. Use 'Whole-government' approach
- 3. <u>Identify relevant interests</u>; design and implement adequate responses
- 4. <u>Need to design adaptation policies</u>: analyse possible distributional/social impacts of reform policies and implement (offsetting) policies, e.g., compensatory packages, as appropriate

For instance, when Ghana eliminated fuel subsidies in 2005, mitigation measures included the elimination of school fees and a programme to improve public transport.

(See Technical Series 56, page 25)

#### General success factors (cont.)

- 5. <u>Funding</u> for offsetting policies/compensatory packages
  - Removing subsidies also saves money!
- 6. Improve transparency and <u>enable informed public debate</u>
  - See case study from Ghana (also: Indonesia)
- 7. Use political windows of opportunity (e.g. budgetary or economic crises)
- 8. (...)

In Ghana's elimination of fuel subsidies, effective government communications on the need for reform were an important success factor. (See Technical Series 56, page 25)

#### Removal

Is rare in its pure form but does exist; political windows of opportunity matter

#### Phase out

- > Set out ambitious end points and more cautious but credible time tables
- Allows stakeholders to adapt gradually
- Transitional support with firm sunset clauses

#### Reform

re-design programmes to enhance cost-effectiveness and targeting while reducing environmental harm

Assigning/strengthening (property) rights, rights-based management Compensatory measures to mitigate perverse incentives in environmental policies

#### Words of caution

- Reform efforts may not be sufficient, in particular in highly dynamic environments – but this does not necessarily speak against the reform as such.
- A limited environmental recovery does not necessarily indicate ineffective reform policies, but rather a need for more comprehensive assessments of all relevant policies and their interactions, and more comprehensive policy action.
- It is an ongoing exercise!

#### For new policies

- Introduce or strengthen SEA
- > UNEP minimum criteria for subsidies (UNEP 2008):
  - **Targeted:** Subsidies should go only to those who they are meant for and who deserve to receive them;
  - **Efficient:** Subsidies should not undermine incentives for suppliers or consumers to provide or use a service efficiently;
  - **Soundly based:** Subsidies should be justified by a thorough analysis of the associated costs and benefits;
  - **Practical:** The amount of subsidy should be affordable and it must be possible to administer the subsidy in a low-cost way;
  - **Transparent:** The public should be able to see how much a subsidy programme costs and who benefits from it;
  - Limited in time: Subsidy programmes should have limited duration, preferably set at the outset, so that consumers and producers do not get 'hooked' on the subsidies and the cost of the programme does not spiral out of control.

#### **Select reading**

- CBD Technical Series No. 56 (2011)
- Short guide on target 3 (1)
- TEEB for International and National Policy-makers, chapter 6