

Addressing incentives that are harmful for biodiversity

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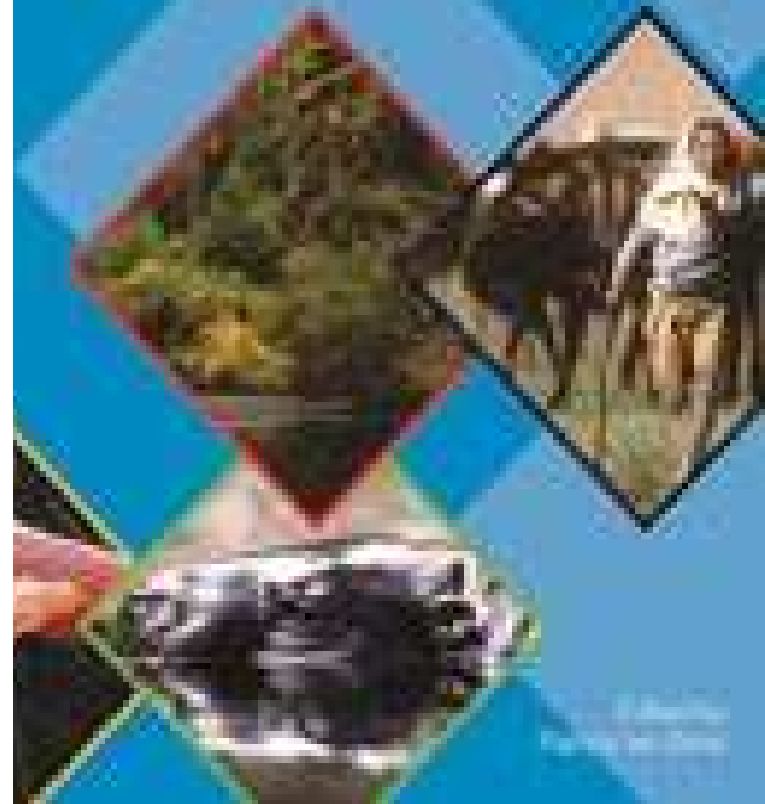
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Incentive measures for the conservation and sustainable use of biological diversity

Case studies and lessons learned



The Economics of Ecosystems and Biodiversity National and International Policy Making



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 unanticipated (and unintended) side effects of policies designed to attain other objectives

What are incentives harmful for biodiversity?

Examples (exercise)



Detect the “perverse” (or harmful) incentive:

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 land use policy prescribes “productive” use of land.

- May discourage sustainable use practices or private conservation

Government introduces fees for the extraction of natural resources.

- Encourages illegal resource extraction

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
 - incentives for the increased use of subsidized resources
 - increased production and consumption levels
 - 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)
 - 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

Activities already undertaken...

- Indonesia: removal of pesticide and fertilizer, fuel subsidies
- India: reform of fertilizer subsidies
- Cambodia: reforming timber royalty rates
- (...)
- See CBD Technical Series no. 56 and TEEB report for international policy-makers (ch. 6)

Few references made in existing NBSAPs

- Few concrete activities identified
- No timelines

Achievements in the region

Maldives, 4th National Report (case study):

“The Maldivian economy is relatively liberalised, and many of the subsidies formerly made to key sectors and industries have been dismantled over recent years. The few subsidies that remain are focused primarily on social sectors such as food, medicines and water (the estimated budget for these subsidies in 2008 is MRf 535.3 million. Temporary subsidies are also allowed for establishing and operating regional sea ports. Energy remains a subsidised sector of the economy, with price interventions on oil imports and energy subsidies to consumers. Although there are plans for a subsidy regime for renewable energy projects, this has not yet been implemented.”

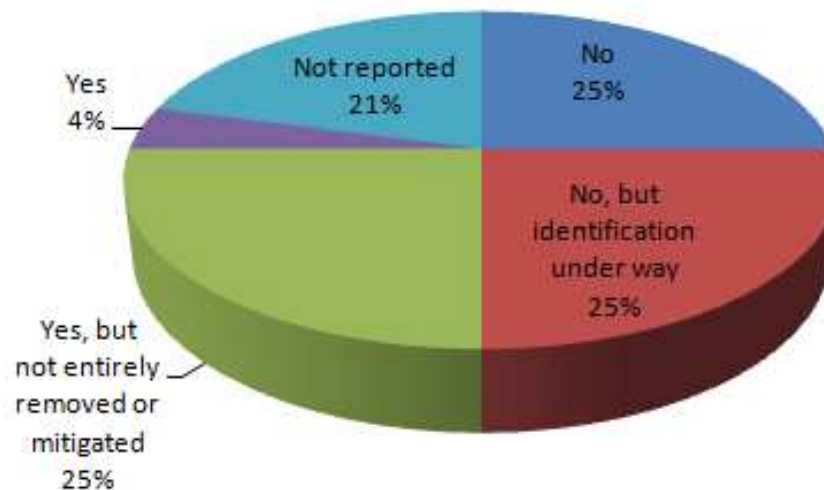
Although there are few or no environmentally-damaging subsidies in the Maldives, in some cases the incentive systems which are offered in order to stimulate economic activity and expand production (for example in the tourism, fisheries and industrial sectors) may serve as perverse incentives with respect to conservation – because they encourage investors and producers to carry out activities in ways and at levels which harm biological resources and ecosystems.”

Achievements in the region

Third national reports

East, South, South-East Asia (20 out of 25 countries)

87. Has your country made any progress in removing or mitigating policies or practices that generate perverse incentives for the conservation and sustainable use of biological diversity? (decision VII/18)	Details
a) No	6
b) No, but identification of such policies and practices is under way	7
c) Yes, relevant policies and practices identified but not entirely removed or mitigated (please provide details below)	6
d) Yes, relevant policies and practices identified and removed or mitigated (please provide details below)	6



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 analyses of available data and
- ✓ enhanced transparency, through ongoing and transparent communication mechanisms on:
 - the amounts and the distribution of perverse incentives provided, as well as
 - of the consequences 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 policy-makers, 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 multi-criteria, holistic approach, which should also include the cost-effectiveness and the social effects 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 free up considerable funds 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 extended to new, proposed policies in order to prevent further adverse effects on biodiversity and ecosystem services (strategic impact assessments). ”

CBD Paris workshop on incentives, October 2009

1. Identification

A quick exercise (10 minutes) for country teams:

- First phase (5 minutes): please work separately and in parallel:
 - Assignment for one country representative: please identify 3 programmes or policies in your country which you believe generate (the most) important harmful incentives for biodiversity and the environment.
 - Assignment for the other country representatives: please identify 3 programmes or policies which you believe are not very (or even: the least) effective/targeted.
- Second phase (5 minutes): Please compare notes. Do you have some overlap?
 - If yes: congratulations! You found *natural* candidates for prioritized removal or reform.
 - If no: please have a look at, and discuss, each other's notes (5 minutes):
 - Are there cost-ineffective programmes with environmentally harmful effects?
 - Are there environmentally harmful programmes which are not very cost-effective?
 - If yes: these could be interesting candidates for prioritized reform.

2. Removal, phase-out, reform

A case study

Box 6.12 Removing fuel subsidies in Indonesia

Before raising fuel prices in October 2005, the government of Indonesia put into place a cash transfer scheme targeting 15.5 million poor and near-poor households (some 28 per cent of the population). The transfers (quarterly payments of about US\$30 per household) lasted for one year. The scheme was widely publicized through newspapers, village notice boards, television talk shows and pamphlets with answers to frequently asked questions.

Though prepared quickly, the programme has performed well. The rapid rollout was followed by many media reports about initial problems, including mistargeting and leakage. The government responded quickly, commissioning an early assessment of the programme which pointed to satisfactory results overall, with transfers made on time and beneficiaries expressing satisfaction.

For poor recipients the cash transfers easily compensate for the fuel price increase. Even with moderate mistargeting – with cash benefits randomly distributed to the poorest 40 per cent rather than the targeted 28 per cent – the programme was expected to prevent a related increase in poverty.

As a consequence, the sharp rise in fuel prices passed without major public protest.

Source: Bacon and Kojima (2006)

Source: TEEB report for policy-makers, ch. 6

2. Removal, phase-out, reform

General success factors

1. Strong leadership and broad support coalition involving key stakeholders
2. Use 'Whole-government' approach
3. Identify relevant interests; design and implement adequate responses
4. Analyse possible distributional impacts of reform policies and implement offsetting policies, e.g., compensatory packages, as appropriate
 - Such as the cash transfer scheme in Indonesia (previous case)
 - Removal of pesticide subsidies in Indonesia was 'compensated' by introducing an Integrated Pest Management Programme
 - In India, enhanced targeting of the fertilizer subsidy shall compensate for reduced subsidy levels

2. Removal, phase-out, reform

General success factors (cont.)

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

2. Removal, phase-out, reform

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

For instance, the Indian fertilizer reform focussed on re-calibrating fertilizer components with a view to better meet nutrient needs

- Assigning/strengthening (property) rights, rights-based management

For instance, Cambodia strengthened forest concessions and increased royalty fees.

- Compensatory measures to mitigate perverse incentives in environmental policies

2. Removal, phase-out, reform

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:
“[...] Removing or mitigating measures [is] a long-term and complex systematic engineering, which shall be constantly perfected during the reform process.”

(China, third national report)

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.

Questions

Identification

- Are there natural or interesting candidates for prioritized removal, phase out or reform (see group work above)?
- Is there public debate on the effectiveness and/or social or environmental impacts of some programmes/policies?
- Are there opportunities to enhance transparency?

Removal, phase out, reform

- Which stakeholders are relevant? Are there stakeholders who could act as champions for removal, phase out, or reform?
- How could stakeholders' interests be addressed (compensation, gradual phase out, ...)? What are the pros and cons of the different options?
- Are there opportunities for enhancing effectiveness while reducing environmental damage?
- Are there opportunities to mitigate harmful impacts?

Towards implementing Aichi target 3

- Consider undertaking concrete action on any 'natural' candidates for removal, phase out, or reform.
- Undertake transparent assessments of programmes and policies examining their effectiveness against stated objectives, their cost-efficiency and their environmental impacts, starting with the 'suspicious' candidates.
- Based on these assessments, develop prioritized plans of action for removal, phase out or reform of incentives harmful for biodiversity by 2020.
- Revised NBSAPs could include a timetable for the preparation of the assessments, and for the development and implementation of the action plan.

Exercise

Per table:

Harmful incentives:

1. Identify possible obvious candidates for prioritized removal, phase-out or reform, for instance policies and/or programmes suspected to be both environmentally harmful and cost-ineffective.
2. How could stakeholder interests/concerns be addressed?

Positive incentive measures:

3. How could existing positive incentive measures be improved?
4. Where in particular do you see a need to introduce new incentive programmes?