

The economics & of ecosystems & bio diversity



IMPLEMENTATION GUIDE FOR AICHI TARGET 3

A TEEB perspective

WHAT IS TARGET 3?

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.

The 20 Aichi Biodiversity Targets for 2015 or 2020 are the key elements of the new **Strategic Plan for Biodiversity 2011-2020**, which the 10th Conference of the Parties to the CBD (COP 10) agreed on in October 2010 in Nagoya, Japan. As explained by the CBD on its website at www.cbd.int/sp/, this new plan will be the overarching framework on biodiversity, not only for the biodiversity-related conventions, but for the entire United Nations system.

The targets are organized under five strategic goals. Goals and targets comprise the aspirations for achievement at the global level, and a flexible framework for the establishment of national or regional targets. Parties are invited to set their own targets within this flexible framework, taking into account national needs and priorities, while also bearing in mind national contributions to the achievement of the global targets. Aichi Target 3 belongs to **Strategic Goal A: Address the underlying causes of biodiversity loss by mainstreaming biodiversity across government and society.**

How can the TEEB implementation guide help?

COP 10 agreed to translate this overarching international framework into **national biodiversity strategies and action plans (NBSAPs)** within two years. Additionally, in decision X/10, the meeting decided that the fifth national reports, due by 31 March 2014, should focus on the implementation of the 2011-2020 Strategic Plan and progress achieved towards the Aichi Biodiversity Targets. The TEEB implementation guide has been written to support CBD National Focal Points or others who are interested in translating the global targets into targets for the national context and in initiating their implementation.

Given the particular national circumstances, national targets may be more specific and more precise than the global target. Targets should be ambitious but realistic.

In the next section, the guide will explain what the target means, relying to a large extent on the explanation provided in the [Quick Guide to Target 3 of the Aichi Biodiversity Targets](#) (CBD 2012). Subsequently, it explains how the target relates to TEEB, that is, why a “TEEB implementation guide” makes sense for this target.

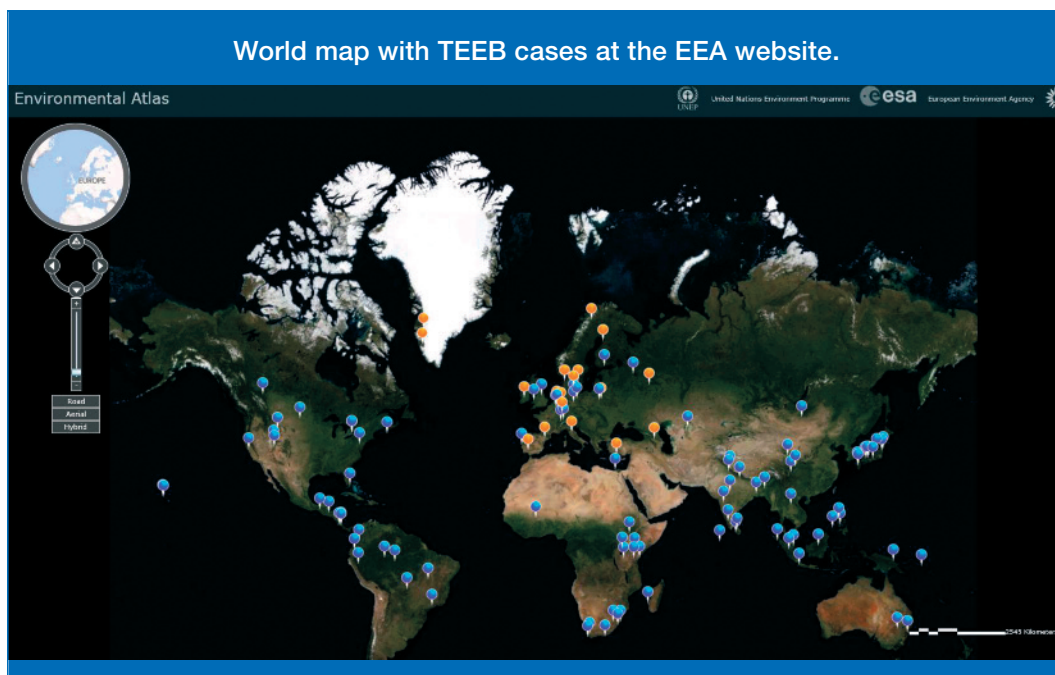
In the section on “how to translate the target to the national level”, the guide builds on the “guiding questions for setting national targets” of the CBD quick guide and presents selected guidance material, tools and case studies that should help answer the questions and thereby support national implementation efforts. This guidance will be complemented by a section on “actions and milestones”, which provides a series of possible starting points and indicators, again taken mostly from the CBD quick guides. Last, the guide presents a list of other CBD COP 10 decisions. This list illustrates how the TEEB specific aspects of the target relate to different issues of biodiversity policy. Some of the decisions also contain useful information and recommendations for national implementation of the target.

Most of the suggested guidance material is taken from the different **TEEB reports** (TEEB 2010, 2011, 2012a, 2012b – see box).¹



The **TEEB case data base** provides practical examples of occasions where ecosystem services have been assessed for better integration in decision-making and policy. The data base is hosted by the European Environment Agency (EEA)'s [Environmental Atlas](http://discomap.eea.europa.eu/map/environmentalatlas/) and can be found at <http://discomap.eea.europa.eu/map/environmentalatlas/>.

¹ Throughout the guide, the colors and the acronyms FND, POL, LCL, BIS are used to refer to the respective sections of the book versions of the TEEB reports. It will be indicated where the free online versions deviate from those.



The information and tools from the TEEB reports and the TEEB case data base will be complemented with references to **additional useful sources, guidance material, and case studies**.

What does this target mean?

Substantial and widespread changes to subsidies and other incentives that are harmful to biodiversity are required to ensure sustainability. Ending or reforming harmful incentives is a critical and necessary step that also generates net socio-economic benefits. The creation or further development of positive incentives for the conservation and sustainable use of biodiversity, provided that such incentives are in harmony with the Convention and other relevant international obligations, could also help in the implementation of the Strategic Plan by providing financial resources or other motives to encourage actors to undertake actions which would benefit biodiversity.

This target has implications for both harmful and positive incentive impacts on biodiversity:

- **Incentives, including subsidies, harmful to biodiversity** generally emanate from policies or programmes that induce unsustainable behaviour harmful to biodiversity, often as unanticipated and unintended side effects of policies or programmes designed to achieve other objectives. Types of possibly harmful incentives include production subsidies and consumer subsidies while policies and laws governing resource use, such as land tenure systems and environmental resource management, can also have harmful effects.
- **Positive incentives** are economic, legal or institutional measure designed to encourage activities beneficial to biodiversity. Positive incentives can include such things as public or grant-aided land purchases or conservation easements.

This target also requires Parties to undertake several types of actions. Depending on national circumstances Parties should:

- **Eliminate or phase out harmful incentives.** Both the elimination or phasing out of harmful incentives require Parties to end support for such incentives. For some types of incentives it may be possible to eliminate them outright. However for most incentives a more scaled or gradual approach may be required as different sectors or group in society have come to depend on them, and in some cases there are powerful vested interests for maintaining them.
- **Reform harmful incentives.** In some cases it will not be possible eliminate of phase out harmful incentives as they are deemed important for other societal objectives. In these cases biodiversity harmful incentives should be reformed so that their negative impacts are reduced as much as possible.
- **Develop and apply positive incentives for the conservation and sustainable use of biodiversity.** In addition to eliminating, phasing out or reforming harmful incentives Parties have committed to developing and applying incentives positive for biodiversity as a means of safeguarding biodiversity.

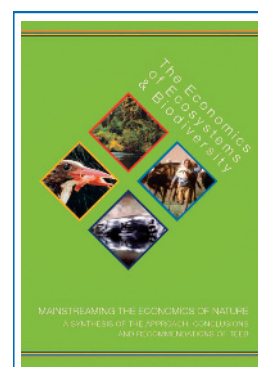
An overarching principle in this target is that any actions taken should be in harmony with the Convention and other relevant international obligations, taking into account national socio-economic conditions. As such incentives should contribute to the conservation of biological diversity and the sustainable use of its components and not negatively affect biodiversity and livelihoods of other countries and contribute to sustainable development and the eradication of poverty.

How does this target relate to TEEB?

TEEB deals extensively with the creation of appropriate incentives in policy instruments and institutions for “capturing” the value of biodiversity and ecosystem services.

One of the main **recommendations of the TEEB Synthesis report** (TEEB 2010, p. 27) relates directly to this aspect:

- **CHANGING THE INCENTIVES.** The principles of ‘polluter pays’ and ‘full-cost recovery’ are powerful guidelines for the realignment of incentive structures and fiscal reform. In some contexts, the principle of ‘beneficiary pays’ can be invoked to support new positive incentives such as payments for ecosystem services, tax breaks and other fiscal transfers that aim to encourage private and public sector actors to provide ecosystem services.



Reform of property rights, liability regimes, consumer information and other measures can also stimulate private investment in conservation and sustainable use. As a first step, all governments should aim for full disclosure of subsidies, measuring and reporting them annually in order that their perverse components may be recognized, tracked and eventually phased out.

How to translate Target 3 to the national level?

1. What subsidies exist in the country that are harmful to biodiversity?

How are the subsidies affecting biodiversity? Which are particularly harmful? What is the cost of these subsidies?

The following chapter and specific aspects from the TEEB reports are important:

POL Ch. 6: Reforming subsidies (p. 259)

- For an overview on sectors that receive subsidies harmful to the environment, see here below Table 6.1, taken from **POL Ch. 6** (p. 265).

Table 6.1: Aggregate subsidy estimates for selected economic sectors

Sector	Region
Agriculture	OECD: US\$ 261 billion/year (2006-8) (OECD 2009) Biofuels: US, EU and Canada US\$ 11 billion in 2006 (GSI 2007; OECD 2008b)
Fisheries	World: US\$ 15-35 billion (UNEP 2008)
Energy	World: US\$ 500 billion/year (GSI 2009a) US\$ 310 billion in the 20 largest non-OECD countries in 2007 (IEA 2008)
Transport	World: US\$ 238-306 billion/year – of which EHS US\$173-233 billion (EEA 2005)
Water	World: US\$ 67 billion – of which EHS US\$ 50 billion (Myers and Kent 2002)

The following tools and guidance from other sources seem useful:

- For a general overview on subsidies harmful to the environment, see Myers & Kent (2001).
- For general guidance on addressing incentives that are harmful to biodiversity, including a series of case studies, see CBD (2011, pp. 7-12).
- On fishery subsidies:
 - The World Bank has issued a report on [The Sunken Billions – The Economic Justification for Fisheries Reform](#) and found out that \$50 billion in annual revenue are lost due to unsustainable fishing practices (mostly overfishing). Fishery subsidies, estimated to be at a global level of \$10 billion per year, often provide incentives for overfishing and thus worsen the situation (World Bank 2008).

- The UNDP reports that fishery subsidies in Latin America and the Caribbean are harmful to the sustainable provision of ecosystem services. The report on the [Importance of Biodiversity and Ecosystems in Economic Growth and Equity in Latin America and the Caribbean](#) recommends shifting subsidies to sustainable ecosystem management (UNDP 2008).
- Fishery subsidies are seen as a critical issue for trade and sustainable development at the WTO (UNEP 2008).
- According to a [TEEB case from Argentina](#), fishery subsidies incentivize fleets to permanently overfish with disastrous consequences for the fishery industry. A study found out that both producers and consumers would be better off if such incentives would be removed (Villasante 2010, UNDP 2008, p. 99).
- For more case studies on fishery subsidies, see UNDP (2008, pp. 102-106).
- On agricultural subsidies:
 - In 2003, the EU has adopted a reform of its Common Agricultural Policy, which provides subsidies for agricultural production. The reform effectively decoupled the payments to farmers from their agricultural production, and was paid instead based on the area available to the farmer. In addition, the prerequisite for receiving payments for farmers was to comply with standards of public, animal and plant health, the environment and animal welfare.
 - A [TEEB case study from the region Mecklenburg-Vorpommern](#) in Germany shows how agricultural subsidies render the restoration of drained peat land economically unviable, where such restorations would facilitate the provision of important ecosystem services such as carbon sequestration and storage (Förster 2010a).
 - A [CBD case study from Indonesia](#) explains how the country removed pesticide subsidies (CBD 2012b).
 - A [UNDP case study](#) (see Box 6.2) illustrates the impacts of fertilizer subsidies in [India](#) (UNDP 2008, p. 61).

Box 6.2. The Impacts of Fertilizer Subsidies in India

India has heavily subsidized fertilizer use for more than three decades. Increased demand and the soaring price of hydrocarbons, the main ingredient of many fertilizers, have taken India's annual subsidy bill to more than \$20 billion in 2009 from \$640 million in 1976.

These subsidies are not reflected in productivity increases; yet, these subsidies do create distortions, such as overuse of urea. Urea-use is so degrading to the soil that yields of some crops are falling. For instance, India now produces less rice per hectare than its neighbors, Pakistan, Sri Lanka, and Bangladesh. Food imports are rising. As a result, India spends almost twice as much on imported foods now as it did in 2002. Wheat imports reached 1.7 million tons in 2008, up from about 1,300 tons in 2002 (Ministry of Agriculture).

The government intends to adopt a new subsidy program in 2010, which will give farmers incentives to use a better mix of nutrients but the old subsidy on urea will remain in place. This means that farmers still have an incentive to overuse this input, with negative effects on soil quality and crop productivity.

India is unlikely to return to the days of 9% economic growth unless the country can reinvigorate its agricultural sector, on which the majority of citizens rely for a living. Recent reports show agriculture lagging behind other industries such as manufacturing and services, with growth under 2%. Double-digit food inflation (food prices rose 19% last year), and declining yields seriously threaten poorer and rural sectors.

Source: Wall Street Journal (2010).

- A [CBD case study from Austria](#) deals with the removal of subsidies for wetland drainage (CBD 2012c).
- A [CBD Case study from New Zealand](#) illustrates the removal of agricultural and fisheries subsidies (CBD 2012f).

The following additional case studies are relevant here:

- A [CBD case study from Denmark](#) deals with the removal of perverse incentives in the forestry sector. For more details on forestry subsidies, see UNDP (2008, pp. 146-147).
- For other case studies on removing perverse subsidies, see CBD (2011, pp. 20-32).
- The CBD has a database that contains useful information and case studies on removing perverse subsidies (CBD 2012e).
- A [CBD case study from Ghana](#) illustrates the importance of communication when removing subsidies harmful to biodiversity (CBD 2012a).

2. What other harmful incentives exist in the country?

How do they affect biodiversity? Are there opportunities for enhancing effectiveness while reducing environmental damage? Are there opportunities to mitigate the harmful impacts by reforming the incentive?

The following chapter and specific aspects from the TEEB reports are important:

POL Ch. 7: Addressing losses through regulation and pricing (p. 286)

- TEEB addresses in **POL Ch. 7** how a comprehensive regulatory framework should complement policies based on subsidies and rewards in order to halt the loss of biodiversity and ecosystem services. Such a framework would be based on the economic principles of “polluter pays” and “full cost recovery” and can be enabled through environmental standards and liabilities (**POL Ch. 7.2**), offsetting schemes (**POL Ch. 7.3**), market-based instruments (**POL Ch. 7.4**), combined with appropriate monitoring, enforcement, and criminal prosecution (**POL Ch. 7.5**).

The following case studies are relevant here:

- In Bolivia, problems of ecosystem degradation and water shortages for local communities was solved by introducing a payment for ecosystem services (PES) scheme with two payment streams. While the US Fish and Wildlife Service pays for the protection of habitat for migratory bird species, downstream irrigators pay to conserve the same upland forest and puna vegetation that helps maintain water supplies for everyone (Asquith et al. 2008).
- In a seminal study, Barbier & Sathirathai (2004) scrutinize the economics behind mangrove conversion in Thailand and found out that a comprehensive inclusion of ecosystem services provided by mangroves can significantly change the economic evaluation for decisions to convert mangroves for other land uses.
- A [CBD case study from Cambodia](#) deals with correcting perverse incentives for unsustainable logging and raising royalties on forest exploitation (CBD 2012g).

3. What are the opportunities and constraints to removing, reforming or phasing out harmful incentives?

What are the potential ecological, economic, and social costs and benefits of addressing harmful subsidies?

The following chapter and specific aspects from the TEEB reports are important:

POL Ch. 6 Reforming subsidies (p. 259)

- The effect of subsidies on ecology, economy and society vary. For more details on how subsidies can harm or benefit the environment, see **POL Ch. 6.2.2** and **POL Ch. 6**, Box 6.4, (p. 272) for an example.
- Subsidies always have distributional effects, as illustrated in Box 6.2 (see below, taken from **POL Ch. 6.2**, p. 266):

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

- Reform, removal or phasing-out of subsidies needs to be well-planned in advance since many aspects and stakeholders might be affected. For a detailed road map for reform, see **POL Ch. 6.4**, Box 6.14, (pp. 285-286) and **POL Ch. 6.4.3**:

Box 6.14: Developing a road map for reform: a checklist for policy-makers

Is there a subsidy causing damage to ecosystems and biodiversity?

- 1. Is there harm to the environment?**
- 2. Is there a subsidy in place that contributes to environmental damage?**
(e.g. by influencing consumption, production levels) and if so, what is it?
- 3. Does it lead to significant or potentially excessive resource use?**
e.g. water use leading to loss from aquifers; thresholds crossed (e.g. salination of aquifers); social impacts from reduced resource availability.
- 4. Does it actually harm the environment or do 'policy filters' avoid such pressure/damage?**
Consider wider policy scenarios, regulations (e.g. quotas) and enforcement/legality of activities.

Should the subsidy be the target of reform?

- 5. Does the subsidy fulfil its objectives (social/economic/environmental)?**
If not, it needs reform.

6. Does the subsidy lack an in-built review process and has it been in place for a long time?

If so, it is likely to need reform (i.e. it has already locked in inefficient practices).

7. Are there public calls for reform or removal or calls to use the funds for other purposes?

This is often an indicator for Points 8 and 9.

8. How does the subsidy distribute social welfare? If there are equity issues, it might be worth reforming it.

9. Do any of the subsidy impacts lead to social or other economic losses? e.g. tourism loss following over-fishing.

10. Are there alternative less damaging technologies available which are hindered by the subsidy's existence of the subsidy?

If so, the subsidy might be slowing innovation and creating technological 'lock in'; reform could bring benefits.

11. Does it offer value for money? Where there is still a valid rationale for the subsidy, could the same or less money be used to achieve the same objectives with lesser environmental impacts?

Reform scenarios (if subsidy reform has been identified as bringing potential benefits):

12. Would the reform be **understandable for policy-makers and the public?**

13. Consider **what the reform would entail** (measure changed and compensatory measures). It is rarely a simple case of 'getting rid of the subsidy altogether'.

14. Assess the costs and benefits of potential reform in more detail:

- potential **environmental benefits**: include thinking on benefits in other countries and secondary effects, which can be perverse;
- potential **economic costs**: e.g. national (tax, GDP, etc), sector-wide, for winners and losers within the sector (including new entrants/future industry), for consumers/citizens (affordability);
- potential **social impacts**: e.g. jobs, skills, availability of goods/services, health;
- potential **competitiveness and innovation benefits**
- potential **ethical benefits** e.g. as regard fairness of income, appropriateness of support, links to future generations;
- is the reform **practical and enforceable?**

To identify the likelihood of success and whether it is worthwhile using political capital for reform, the following questions can be useful to set priorities for the road map.

Is there a policy/political opportunity for action?

15. Is there a window of opportunity? e.g. policy review process, evaluation, public demand?

16. Is there a potential policy champion?

17. Will there be sufficient political capital for success?

These questions can be answered at different levels. A quick scan can help develop the overall picture, but more detailed analysis is needed to clarify the details, identify what should be the exact nature of the reform and support the call for subsidy reform.

4. What biodiversity related problems could be addressed with the help of biodiversity friendly incentives?

How could incentives be used to address the main threats to biodiversity? How could incentives encourage actions in support of biodiversity?

The following chapters and specific aspects from the TEEB reports are important:

- POL Ch. 5** : Rewarding benefits through payments and markets (p. 177)
- LCL Ch. 8** : Payments for ecosystem services and conservation banking (p. 223, p. 141 in report)
- LCL Ch. 10** : Certification and labelling (p. 263, Ch. 9 p. 161 in report)
- BIS Ch. 5** : Increasing biodiversity business opportunities (p.159)

The TEEB reports provide an overview of the most common policy tools for positive incentive measures:

- Payments for ecosystem services (PES) are arrangements through which the beneficiary of ecosystem services pay the providers of those services (for more details, see **POL Ch. 5.1**). Thereby, PES schemes offer opportunities for (see also **LCL Ch. 8.1**, pp. 225-226):
 - Conservation of biodiversity;
 - Provision of revenue and employment;
 - Financing and mobilization of sustainable conservation initiatives;
 - Ensuring that ecosystem benefits are compensated by those exploited them;
 - Alleviation of poverty.
- Tax-based mechanisms are fiscal instruments to safeguard ecosystem services and biodiversity. For more details and case studies, see **POL Ch. 5.3**.
- Access and benefit sharing (ABS) measures aim at influencing the values of genetic resources and tries to overcome current constraints on maximizing such value. For more details, see **POL Ch. 5.4**.
- Green Public Procurement (GPP) means that public purchasers take account of environmental factors when buying products, services or works. For more details and case studies, see **POL Ch. 5.6**.
- Certification and labeling is a way of developing markets for green goods and services that can be used nationally and locally (for more details, see **POL Ch. 5.5** as well as **LCL Ch. 10** (represented as **LCL Ch. 9** in report) and, in particular, **LCL Ch. 10.5** (represented as **LCL Ch. 9.5** in report). Thereby, certificates and labels have certain advantages:
 - Provision of information;
 - Provision of assurance;
 - Possibility for the producer to charge a price premium;
 - Facilitation of comparison of products;
 - Possibility to adapt to local conditions.

BIS Ch. 5.4.1 describes in more detail the business opportunities from certification schemes.
- Conservation banking refers to a local offset scheme, under which it pays off to conserve particular habitats and ecosystems. For more details, see **LCL Ch. 8.3** (represented as **LCL Ch. 8.3** in report), as well as **BIS Ch. 5.3**.

The following tools and guidance from other sources seem useful:

- For a general overview of incentive instruments and their advantages and disadvantages, see the following table from CBD 2004, (pp. 10-11):

Instrument	Advantages	Disadvantages	Applicability
Environmental taxes / charges	Maximize economic efficiency. Easily understandable.	Rely on measurability of single components and on agreement about external cost values. Can require extensive monitoring.	Applicable in situations where impacts are easily measurable (e.g. hunting) and sources of impacts can be easily monitored.
Market creation	Results in the most efficient allocation of resources between competing users and generates appropriate prices for them. Low monitoring requirements.	May be imperfect where there are (large) external effects and/or monopolies.	Applicable where clearly defined property rights can be established and upheld for easily identifiable goods and services, and transaction costs are low enough.
Removal of perverse incentives	Reforming or removing these incentives can lead to an easing of pressures on the environment, improved economic efficiency and reduced fiscal expenditures.	Perverse incentives can often be difficult to identify (lack of transparency). They may be politically difficult to reform because of the strong opposition from recipients.	Applicable where clear benefits in terms of budgetary, economic efficiency and/or environmental goals can be identified and potential compensatory measures exist to facilitate the support removal process.
Regulations	Easily understandable. Legally binding. Can target directly particular activities or processes.	Can be economically inefficient or costly method of achieving environmental goals, especially if proscribing certain technologies. Strict enforcement is necessary. Inflexible. May be complex and detailed.	Most applicable where there is a limited range of easily identifiable environmental impacts that need circumscription and/or where the number of actors is limited.
Environmental funds	Transparent and high visibility. Positive public relations.	May not maximize economic efficiency. May be inflexible because funds are earmarked to some extent.	Applicable where Governments have difficulties raising general funds, where fiscal infrastructure is weak and where clearly identifiable and highly popular causes exist.
Public financing	Popular with recipients. Promotes desirable activities rather than prohibiting undesirable ones.	Requires funding. May lead to economic inefficiencies. May encourage rent-seeking behavior.	Applicable in situations where desirable activities would not be undertaken without support or to create a differential in favour of such activities where it is not feasible to discourage the undesirable alternatives.

- For further guidance on promoting positive incentive measures, see CBD (2011, pp. 14-18).
- The CBD has a database that contains useful information and further case studies on the promotion of positive incentives (CBD 2012d).
- The IUCN Water Programme provides a toolkit on [Establishing Payments for Watershed Services](#) (Smith et al 2006).

The following case studies are relevant here:

- The CBD has collected a number of relevant case studies related to positive incentive measures - see CBD (2012d and 2011, pp. 33-60).
- The IUCN Water Programme provides several cases on watershed markets (IUCN Pay).

5. Who are the stakeholders that may be affected?

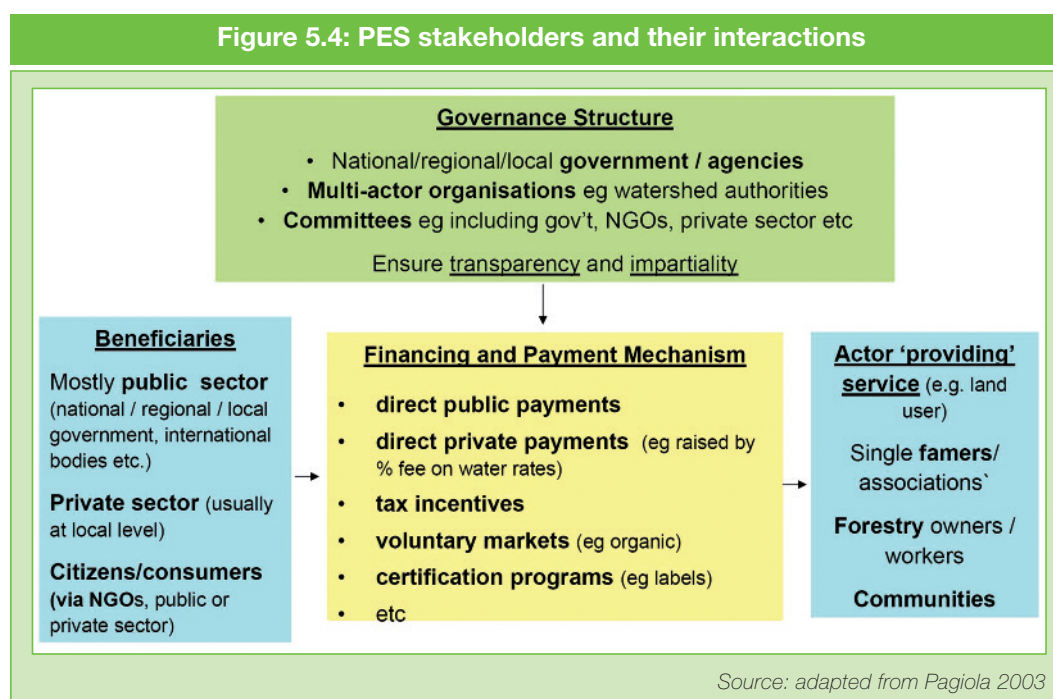
How can they be involved and their needs addressed? What are the trade-offs to consider?
Are there stakeholders who could also act as champions for the removal, phase out, or reform of harmful incentives?

The following chapter and specific aspects from the TEEB reports are important:

POL Ch. 5 : Rewarding benefits through payments and markets (p. 177)

LCL Ch. 11 : Making your natural capital work for local development (p. 281, Ch.10 p.173 in report)

- Figure 5.4 (see below) depicts PES stakeholders and their interactions (**POL Ch. 5.1** , p. 186):



- **LCL Ch. 11.3** (p. 289) highlights the importance of stakeholder participation for local development and provides advice and examples for designing participatory processes and dealing with conflicts.

The following case study is relevant here:

- In a TEEB case from the Kala Oya river basin in Sri Lanka, water supply from the river was mostly used for paddy crop cultivation leading to a degradation of wetlands with adverse consequences for the livelihoods of local communities. By valuing the ecosystem services provided by the traditional irrigation system, a participatory study provided decision-makers with information on costs and benefits of regulating water supply (Förster 2010 b).

Actions and milestones

In most countries there are likely to be a number of incentives with negative effects on biodiversity. Therefore, countries may need to be strategic in formulating their targets, and apply an iterative approach. Ultimately, as most incentive mechanisms are beyond the control of environment ministries, there will be a **need to involve and cooperate with other sectors of government** as well as the stakeholders impacted by any changes to current incentive schemes or mechanisms.

Actions taken to achieve this target can be guided by the CBD programme of work on Economics, Trade and Incentive Measures. As a first step countries may wish to **identify which biodiversity harmful subsidies exist in their country**. Based on this, countries could **choose those incentives which are particularly detrimental to biodiversity and prioritize these for removal, phasing out, or reform**. Obvious candidates would include those policies or programmes which are suspected to be both environmentally harmful and not very cost-effective against their stated objectives. With regards to positive incentives, a first step could be to **identify areas where incentives could have a positive impact on biodiversity**. When developing positive incentives it will be important to **interact with the stakeholders involved** and to ensure that the mechanisms designed are effective in their intended purpose.

Possible indicators:

- Trends in the number and value of incentives, including subsidies, harmful to biodiversity, removed, reformed or phased out.
- Trends in identification, assessment and establishment and strengthening of incentives that reward positive contribution to biodiversity and ecosystem services and penalize adverse impacts.

CBD COP 10 decisions with TEEB-relevant information for Target 3

The following COP 10 decisions provide useful additional information and recommendations for implementation of Aichi Target 3.

Subsection	Relevant text of COP decision
Decision X/2 – The Strategic Plan for Biodiversity 2011-2020	
Annex I, 10.a.	Achieving this positive outcome requires actions at multiple entry points [including] initiating action to address the underlying causes of biodiversity loss, including production and consumption patterns, by ensuring that biodiversity concerns are mainstreamed throughout government and society, through communication, education and awareness, appropriate incentive measures, and institutional change.
Decision X/3 – Strategy for resource mobilization in support of the achievement of the Convention's three objectives	
A.9.c.	The COP considers [...] that all Parties provided with adequate financial resources, will have, by 2015 increased the number of initiatives for the removal, reform or phase-out of incentives, including subsidies harmful to biodiversity, which could be used for the promotion of positive incentives that are consistent and in harmony with the Convention and other international obligations.
Decision X/21 – Business engagement	
1.e.	The COP invites Parties to develop, and report on, national activities that promote and facilitate the mainstreaming of biodiversity by business, such as through regulations and, as appropriate, economically and socially sound incentive measures, national biodiversity strategies and action plans as well as national reports.
Decision X/22 – Plan of Action on Subnational Governments, Cities and Other Local Authorities for Biodiversity	
Annex G.13.c.	Parties may identify funding avenues oriented specifically towards biodiversity at the subnational and local levels for the implementation of this plan of action. Initiatives may include, inter alia [...] exploring opportunities presented by environmental fiscal reforms, including innovative tax allocation models and fiscal incentives for achieving the three objectives of the Convention at the subnational and local levels.
Decision X/24 – Review of guidance to the financial mechanism	
4.8.	<p>The Global Environment Facility should provide financial resources to developing country Parties, taking into account the special needs of the least developed countries and the small island developing States, as well as Parties with economies in transition, for country-driven activities and programmes, consistent with national priorities and objectives and in accordance with the following programme priorities [...]</p> <p>(a) Design and approaches relevant to the implementation of incentive measures, including, where necessary, assessment of biological diversity of the relevant ecosystems, capacity-building necessary for the design and implementation of incentive measures and the development of appropriate legal and policy frameworks;</p> <p>(b) Projects that incorporate incentive measures that promote the development and implementation of social, economic and legal incentive measures for the conservation and sustainable use of biological diversity;</p> <p>(c) Projects that assist with the implementation of the programme of work on incentive measures;</p> <p>(d) Innovative measures, including in the field of economic incentives and those which assist developing countries to address situations where opportunity costs are incurred by local communities and to identify ways and means by which these can be compensated.</p>
Decision X/31 - Protected Areas	
B.1.10.a.	The COP invites Parties to develop and implement sustainable finance plans in accordance with national legislation and systems, for protected area systems by 2012 and support individual protected areas, based on realistic needs assessments and a diversified portfolio of traditional and innovative financial mechanisms, such as, inter alia, payments for ecosystem services, as appropriate.

Decision X/32 – Sustainable use of biodiversity	
2.h.	The COP invites Parties and other Governments to [...] review and revise, and update where appropriate, national incentive measures and frameworks with a view to mainstreaming the sustainable use of biodiversity into production, private and financial sectors; and identifying and removing or mitigating incentives that are harmful to biodiversity. The strengthened existing incentives, as well as new incentives, should be consistent and in harmony with the three objectives of the Convention and other relevant international obligations.
Decision X/44 – Incentive Measures	
3.	The COP invites Parties and other Governments as well as relevant international organizations and initiatives, to take the information and the compilation of good-practice cases into consideration in their work on identification and removal or mitigation of perverse incentives, and the promotion of positive incentive measures for the conservation and sustainable use of biodiversity, bearing in mind that the possible impacts of incentive measures could vary from country to country, in accordance with national circumstances.
6.	The COP, recognizing the importance of assessing the values of biodiversity and ecosystem services for the enhanced calibration of positive incentive measures, invites Parties and other Governments, in accordance with their national legislation, to take measures and establish, or enhance mechanisms with a view to accounting for the values of biodiversity and ecosystem services in public and private sector decision making, including by revising and updating [NBSAPs] to further engage different sectors of government and the private sector, building on the work of the TEEB initiative, the UNDP regional initiative on the importance of biodiversity and ecosystems for sustained growth and equity in Latin America and the Caribbean, and other relevant initiatives, and to also consider undertaking, as appropriate, similar studies at national level.
8.	The COP invites national, regional and international funding institutions to support the building or enhancement of national capacities for assessing the values of biodiversity and ecosystem services, for identifying and removing or mitigating perverse incentives, and for the design and implementation of positive incentive measures for the conservation and sustainable use of biodiversity.
10.	The COP [...] encourages Parties and other Governments to promote the design and implementation, in all key economic sectors, of positive incentive measures for the conservation and sustainable use of biodiversity that are effective, transparent, targeted, appropriately monitored, cost-efficient as well as consistent and in harmony with the Convention and other relevant international obligations, and that do not generate perverse incentives, taking into account, as appropriate, the range of positive incentive measures identified in the report for policy-makers of the TEEB initiative, the "polluter pays principle" and the associated "full-cost recovery principle", as well as the livelihoods of indigenous and local communities.
11	The COP [...] encourages Parties and other Governments to engage with businesses and enterprises on ways and means to contribute to the national implementation of the Convention, including through the design and implementation, with their participation, of direct and indirect positive incentive measures for the conservation and sustainable use of biodiversity.

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