

VI/15. *Incentive measures*

The Conference of the Parties

Underlining the special importance of designing and implementing incentive measures in reaching the objectives of the Convention, especially in regard to the sustainable use of biological diversity, as well as in removing negative impacts on biodiversity,

Recognizing the importance of incentive measures for other cross-cutting issues, such as access to genetic resources and the fair and equitable sharing of benefits arising from their utilization,

Underlining the need for cooperation and collaboration of international organizations in efforts to assist Governments in designing and implementing incentive measures,

1. *Takes note with appreciation* of the progress made in the implementation of the programme of work on incentive measures, established in decision V/15 of the fifth meeting of the Conference of the Parties;
2. *Endorses* the proposals for the design and implementation of incentive measures and the recommendations for further cooperation on incentive measures, contained respectively in annexes I and II to the present decision, as far as they are consistent with Parties' national policies and legislation as well as their international obligations;
3. *Invites* Parties to take these proposals into consideration when designing and implementing incentive measures for conservation and sustainable use of biological diversity;
4. *Recognizes* that further work has to be undertaken on positive incentives and their performance, as well as on perverse incentives and ways and means for their removal or mitigation;
5. *Encourages* Parties and relevant organizations to submit case-studies, lessons learned and other relevant information on incentive measures, especially on positive and perverse incentives, to the Executive Secretary;
6. *Requests* the Executive Secretary to continue compiling and disseminating the information on incentive measures submitted by Parties and organizations, through the clearing-house mechanism of the Convention and other means;
7. *Also requests* the Executive Secretary, in collaboration with relevant organizations, to elaborate proposals for the application of ways and means to remove or mitigate perverse incentives, for consideration by the Subsidiary Body for Scientific, Technical and Technological Advice at a meeting prior to the seventh meeting of the Conference of the Parties;
8. *Requests* Parties, Governments, international and other relevant organizations to provide financial support for the programme of work on incentive measures, taking into consideration the specific circumstances of countries, in particular small island developing States and countries with economies in transition.

Annex I

PROPOSALS FOR THE DESIGN AND IMPLEMENTATION OF INCENTIVE MEASURES

1. In general terms, incentive measures should be designed to address the conservation and sustainable use of biological diversity, while taking into account:

- (a) Local and regional knowledge, geography, circumstances and institutions;
- (b) The mix of policy measures and structures in place including sectoral considerations;
- (c) The need to match the scale of the measure to the scale of the problem;
- (d) The measures' relationship to existing international agreements.

2. The following elements should be taken into consideration in the design and implementation of incentive measures for the conservation and sustainable use of biological diversity:

A. *Identification of the problem: purpose and issue identification*

3. ***Goals of the incentive measures.*** An incentive measure should have a defined purpose. Consistent with decision V/15, the purpose of incentive measures is to change institutional and individual behaviour in order to achieve in whole or in part the following objectives of the Convention on Biological Diversity: the conservation of biodiversity, the sustainable use of the components of biodiversity and the fair and equitable sharing of benefits arising out of the utilization of genetic resources.

4. ***Underlying causes/threats to biodiversity.*** The identification of the proximate and underlying causes and the importance of threats to biodiversity and its components are a prerequisite for the selection of the appropriate measure to stop or reverse degradation. Policies that create incentives without removing the underlying causes of biodiversity loss (including perverse incentives) are unlikely to succeed. Therefore, prior to embarking on an exercise to develop incentive measures for conservation or sustainable use, it is important to undertake a thorough study to identify and evaluate the respective and mutually reinforced impacts of any underlying pressures.

5. This study should specifically include threats generated by social or economic forces or by the institutional framework. In some cases social and economic issues are at the root of unsustainable practices and, while addressing market and policy failures with incentive measures may help correct this behaviour, the measures may not address core problems such as lack of resources or poverty and unjustified human demands beyond needs. This might also include the analysis of existing incentive measures, at the national and at the international level; specifically, perverse incentives that might threaten biodiversity, and the barriers that stand in the way of their removal, should be identified.

6. While most of the underlying causes in general are listed in the OECD Handbook of Incentive Measures for Biological Diversity: Design and Implementation, 26/ it is important that each country implement incentive measures that are targeted at specific causes relevant to its circumstances. Incentives may be directed to correct some underlying causes related to economic development trends, poverty, lack

26/ OECD Handbook of Incentive Measures for Biological Diversity: Design and Implementation (OECD, 1999).

of policy integration, sectoral policy impacts, and perverse measures undertaken at the national, supra-national and international levels.

7. **Identification of relevant experts and stakeholders.** As well as including policy-makers, experts and scientists, the range of stakeholders should include the private sector, women, and local communities as well as individuals, relevant national and multilateral organizations, non-governmental organizations and representatives of indigenous and local communities. These stakeholders may have contributed to the issue and/or have practical knowledge of it and could be key players in its successful implementation. Moreover, different levels of decision-making (local, subnational, national, subregional, regional, international) and their interrelationship must be taken into consideration in order to ensure coherence of the measure.

8. **Establish processes for participation.** In order to ensure that incentive measures are developed in a manner that is participatory and promotes effective policy integration and stakeholder participation, processes should be established to facilitate intergovernmental dialogue as well as dialogue with relevant stakeholders including indigenous and local communities and representatives of civil society.

9. **Set clear targets and indicators.** To the extent feasible, incentive measures should have targets that are specific, measurable, time-driven, and based on an analysis of their effects. The successful monitoring and evaluation of their impacts is an important factor in ensuring the ultimate success of incentive measures. For example, indicators can facilitate the evaluation of a measure and provide useful information in determining the need for corrective action.

B. Design

10. **Ecosystem approach.** The design of incentive measures should, where appropriate and feasible, be based on an ecosystem approach as defined in the framework of the Convention.

11. **Sectoral approach.** The design of incentive measures should also be based, where possible, on an analysis of the incentives of the different economic sectors such as tourism, forestry, fisheries and agriculture.

12. **Sectoral mainstreaming.** Consideration should be given to integrating biodiversity incentives into the incentives provided through other sectors, where appropriate.

13. **Carrying capacity.** The carrying capacity of the different ecosystems has to be fully considered in the design of incentive measures, as the use of resources may be limited by carrying capacity.

14. **Precautionary approach.** Combined with the ecosystem approach, a precautionary approach requires that programmes on incentive measures err on the side of caution when scientific knowledge is uncertain and where there is a threat of significant reduction or loss of biological diversity.

15. **The efficiency objective.** Programmes on incentive measures should primarily consider those measures which best meet biodiversity objectives, and should be designed to ensure that expected benefits are greater than or equal to the cost of implementation, administration, and enforcement. The social and institutional context of a country can affect these costs considerably. Whenever benefits cannot be adequately quantified, cost-effectiveness analysis (i.e., to achieve a given target at minimum cost) should be applied.

16. **Internalization.** Internalization should be considered as one of the guiding principles for selecting appropriate incentive measures to prevent, arrest or reverse the loss of biodiversity and take into account other relevant environmental concerns, such as climate change, desertification and deforestation. Internalization refers to the incorporation of external costs and benefits into the decisions of producers and consumers. External costs and benefits are essentially environmental “side-effects” of economic activities and incentive measures should strive to internalize a greater proportion of these effects in the calculation of decision makers and consumers. When full internalization is not possible (due to economic and social circumstances), incentives should be designed so as to make sustainable activities more attractive than unsustainable ones.
17. **Undertaking valuation.** While recognizing that full internalization is often not possible because of limitations of valuation methods, as recognized by the Conference of the Parties in its decision IV/10, valuation is nevertheless an important step for better internalizing and raising awareness of the importance of biodiversity values.
18. **Underlying cause of biodiversity loss.** Programmes on incentives should be designed to address the underlying causes of biodiversity loss.
19. **Comprehensibility.** While recognizing the interaction of many factors, incentive measures should remain as simple and focused as possible, allowing for faster implementation and clearer assessment of their effects. They should be easily understood by all stakeholders.
20. **Equity: distributional impacts.** In designing incentive measures, it is important to ensure that the definition of beneficiary communities is inclusive and equitable. A participatory approach to the design and implementation of incentive measures can help ensure that these issues are considered. Any conservation measure has some impact on stakeholders; incentive measures should aim to take into account those who benefit and those who assume the cost of the measure. Incentive measures should be designed and introduced in a way to support poverty alleviation and reduction of disparities between rural and urban communities.
21. **Capturing value for indigenous and local communities.** The value of biological diversity for subsistence, cultural or commercial purposes should be recognized and incentive measures designed so that, to the extent possible, they support the social and economic development needs of indigenous and local communities. The approach of these communities in determining the values of biological diversity should be taken into consideration.
22. **Raising awareness of biodiversity values and services.** Identifying and assessing the value of biodiversity and of the environmental services that it provides can be an incentive in itself and supports the design of other incentive measures. Raising awareness among all stakeholders of the value and services of biodiversity improves the chances for incentive measures to be successful.
23. **Mix of measures.** In many cases, a combination or combinations of various measures is likely to be necessary in order to realize both the public benefits of protecting biodiversity and the private benefits brought about by the sustainable use of its components.
24. **Monitoring and evaluation.** Incentive measures should be designed to facilitate monitoring and evaluation of their successes and failures.
25. **Political and cultural acceptability.** The political and cultural context in which any incentive measure is developed should be taken into account in the design of the instrument.

26. **Funding.** Funding, as appropriate, should be ensured in the design of the incentive measure.

C. Provision of capacity and building of support: facilitating implementation

27. **Physical and human capacity.** Implementation of incentive measures will require adequate physical and human capacity. This includes scientific and technical capacity, as well as capacity related to administrative, educational, training and communications issues. In many cases, in the implementation phase of incentive measures, there will be an ongoing need for training of trainers, managers and other workers, public-education programmes and other forms of human capacity-building. In other cases, there may be a need for physical capacity-building, including the installation of monitoring equipment or other infrastructure needs. Training will often be a necessary component for the effective implementation of incentive measures.

28. **Institutional mechanisms.** Institutional mechanisms are required to encourage dialogue and communication between policy makers within government and stakeholders outside of government at the national and local levels, in order to promote policy integration. Ensuring that avenues exist for intra-governmental dialogue between relevant ministries and agencies with an interest in biodiversity is important, as government agencies will often share responsibilities in the implementation of incentive measures. Community institutional structures should be developed to make indigenous and local communities equal partners in the implementation of incentive measures. For the implementation of incentive measures, existing institutional arrangements should be recognized and strengthened or new ones should be established, as necessary for the conservation and sustainable use of biological diversity.

29. **Transparency and dissemination of public information.** Dissemination of information can play a key role in building support for incentives for conservation and sustainable use. Information on the effects of pressures on biodiversity should be disseminated among stakeholders, administrative and policy authorities and civil society. The provision of information regarding the incentive measure itself to stakeholders and transparency in implementation are also important.

30. **Stakeholder involvement.** Even after the design of a measure, stakeholders should be involved to ensure that incentive measures are implemented effectively on the ground. Relevant stakeholders should play a role in building the capacity of local institutions and individuals in order to enhance their awareness of the importance of biodiversity conservation measures and facilitate their capacity to participate in all stages of the process, from design to implementation.

31. **Funding.** Funding should be ensured for capacity-building.

D. Management, monitoring and enforcement

32. **Administrative and legal capacity.** The ultimate success of any incentive measure is contingent upon successful management, monitoring, enforcement and evaluation of its impact. Adequate capacity to manage, monitor and enforce incentive measures rests in part on adequate stakeholder involvement and the existence of appropriate institutions. It also depends on available administrative and legal capacity.

33. **Policy-impact indicators.** The development of sound policy-impact indicators is key to any useful valuation of the success or failure of incentive measures.

34. **Information systems.** Information systems could facilitate the process of managing, monitoring and enforcing incentive measures.

35. **Funding.** Adequate funding should be available to ensure the effective management, monitoring and enforcement of incentive measures.

E. Guidelines for selecting appropriate and complementary measures

36. The following are guidelines for selecting appropriate and complementary measures:

(a) Any decision-making process for selecting appropriate and complementary measures should take into account the specific circumstances of the country involved;

(b) It is important to consider the context in which the incentive measure is being introduced to assist final decision-making on a particular measure or measures;

(c) A key consideration in the design of an incentive measure is the recognition that a single measure will often not suffice to address the complexities involved in decisions on biodiversity conservation or sustainable use, and that a mix of measures may be needed;

(d) Equity considerations, such as poverty alleviation, should be given a prominent role in the design and selection of appropriate incentive measures;

(e) The implementation of incentive measures should not result in a significant increase in the cost of living and/or increase in government revenue;

(f) The size of the country's economy is an important factor in the selection of financial incentive measures;

(g) Well defined land and property rights are an important factor in the design and implementation of incentive measures in the conservation of biological diversity and the promotion of sustainable use;

(h) Positive incentives can influence decision-making by recognizing and rewarding activities that are carried out for conservation and sustainable use purposes;

(i) The removal of perverse incentives eases pressure on the environment. The identification of both internal and external perverse incentives and other threats to biodiversity conservation and to the promotion of sustainable use, is essential to the selection and design of incentive measures. The removal of perverse incentives may improve economic efficiency and reduce fiscal expenditures;

(j) Disincentives continue to be an important tool for ensuring the conservation and sustainable use of biological diversity and can be used in combination with positive incentives.

37. In the process of decision-making, the general or specific features of various types of instruments should be taken into account. The following table ^{27/} illustrates a range of existing instruments, their general advantages, disadvantages and applicability. It should be taken into account that this list is not comprehensive since a number of other non-economic incentives (e.g., social and cultural incentives) and international incentives should also be considered in a similar fashion. Furthermore, it has to be taken into consideration that some of the enumerated instruments are still under discussion with respect to their effectiveness and their possible shortcomings.

^{27/} Based on the OECD Handbook of Incentive Measures for Biological Diversity: Design and Implementation.

Instrument	Advantages	Disadvantages	Applicability
Environmental taxes/charges	<p>Maximize economic efficiency.</p> <p>Easily understandable.</p>	<p>Rely on measurability of single components and on agreement about external cost values.</p> <p>Can require extensive monitoring.</p>	<p>Applicable in situations where impacts are easily measurable (e.g., hunting) and sources of impacts can be easily monitored.</p>
Market creation	<p>Results in the most efficient allocation of resources between competing users, and generates appropriate prices for them.</p> <p>Low monitoring requirements</p>	<p>May be imperfect where there are (large) external effects and/or monopolies.</p>	<p>Applicable where clearly defined property rights can be established and upheld for easily identifiable goods and services, and transaction costs are low enough.</p>
Removal of perverse incentives	<p>Reforming or removing these incentives can lead to an easing of pressures on the environment, improved economic efficiency and reduced fiscal expenditures.</p>	<p>Perverse incentives can often be difficult to identify (lack of transparency).</p> <p>They may be politically difficult to reform because of the strong opposition from recipients.</p>	<p>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.</p>
Regulations	<p>Easily understandable.</p> <p>Legally binding.</p> <p>Can target directly particular activities or processes.</p>	<p>Can be economically inefficient or costly method of achieving environmental goals, especially if proscribing certain technologies.</p> <p>Strict enforcement is necessary.</p> <p>Inflexible.</p> <p>May be complex and detailed.</p>	<p>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.</p>
Environmental funds	<p>Transparent and high visibility.</p> <p>Positive public relations.</p>	<p>May not maximize economic efficiency.</p> <p>May be inflexible because funds are earmarked to some extent.</p>	<p>Applicable where Governments have difficulties raising general funds, where fiscal infrastructure is weak and where clearly identifiable and highly popular causes exist.</p>

Instrument	Advantages	Disadvantages	Applicability
Public financing	<p>Popular with recipients.</p> <p>Promotes desirable activities rather than prohibiting undesirable ones.</p>	<p>Requires funding.</p> <p>May lead to economic inefficiencies.</p> <p>May encourage rent-seeking behaviour.</p>	<p>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.</p>

Annex II

RECOMMENDATIONS FOR FURTHER COOPERATION ON INCENTIVE MEASURES

1. Cooperation to assist Governments in designing and implementing incentive measures should be based on the following elements, building on work already under way.

Information

2. It is recognized that the effective design and implementation of incentive measures requires a sound body of knowledge and information. The following measures would assist Parties in ensuring the availability of the required information:

(a) Biodiversity incentives information systems (Internet, flyers, CDs, hard copies, translations, etc.) should be established or strengthened. This could be achieved through the clearing-house mechanism of the Convention, as well as through other competent international, regional, subregional and national organizations;

(b) Information systems should include the following elements:

- (i) Indicators, valuation and assessment methodologies;
- (ii) Meta-analysis of existing cases;
- (iii) Reference manuals and toolkits.

3. Information systems, whether at the national or international level, should be linked to the clearing-house mechanism of the Convention on Biological Diversity.

4. Such information systems would allow Parties to share experiences and lessons learned with other Parties and facilitate the implementation of incentive measures through the use of guidelines.

5. Parties should carry out an assessment of their national biodiversity strategies and action plans to determine whether they are providing incentives for conservation and sustainable use and whether they are identifying and removing perverse incentives.

The involvement of stakeholders including indigenous and local communities

6. States should develop and apply participatory and coherent approaches to policy-making for biodiversity conservation and sustainable use that fully engage all stakeholders including relevant

government departments, non-governmental organizations, the private sector, philanthropic organizations and indigenous and local communities in a meaningful dialogue in a timely fashion and promote a consistent approach to the use of incentive measures for conservation and sustainable use of biodiversity.

7. Particular emphasis could be placed on the following elements:

- (a) Advising policy makers directly on the design and implementation of incentive measures;
- (b) Mobilizing key stakeholder groups in policy dialogues relating to the design and implementation of incentive measures, across governments, non-governmental organizations, the private sector, philanthropic organizations, and indigenous and local communities;
- (c) Building a network of experts on biodiversity incentives who can provide guidance and information related to specific requests from Governments, civil society and the private sector.

8. In order to encourage a participatory approach, the development of a strategy for policy coordination and stakeholder involvement might be considered. This could include an educational component, a communications component, and a component that highlights successful processes that have been used to generate effective public participation. The Parties would be encouraged to adapt successful processes or components of such a strategy to correspond to their own priorities and situations. Such a coherent and participatory approach to policy-making might also encourage the integration of biodiversity concerns into other sectors and policy areas.

Capacity-building

9. Another key to the effective development and implementation of incentive measures is the existence of appropriate legal and policy frameworks and supporting human capacity. The Conference of the Parties has encouraged Governments to develop supportive legal and policy frameworks for the design and implementation of incentive measures. Furthermore, raising awareness of decision makers and stakeholders on the importance of incentives to achieve the objectives of the Convention is an important aspect of human capacity-building.

10. The following elements are proposed in order to meet this requirement:

- (a) Training biodiversity specialists and decision makers in the design and implementation of incentive measures including training in the use of valuation tools;
- (b) Implementing training programmes on basic scientific and economic issues related to the conservation and sustainable use of biodiversity;
- (c) Explaining the value of biodiversity at the community level and within sectors, such as agriculture and forestry;
- (d) Building capacity related to public awareness;
- (e) Developing capacity to conduct research and analysis on incentive measures;
- (f) Developing supportive legal and policy frameworks;
- (g) Undertaking legislative reviews and providing advice on incentive measures;

- (h) Developing avenues for financing where necessary.

Valuation

11. Despite the challenges associated with non-market valuation, it is nonetheless important to pursue ways of creating market signals for the social, cultural and economic values of biodiversity. The Conference of the Parties has recognized the importance of valuation as a tool for designing appropriate incentives. ^{28/}

12. Continued work on valuation can be costly, requires considerable expertise and the ultimate results may be difficult to communicate and the derived monetary values open to challenge. Nevertheless, the methodologies for undertaking valuations should be developed further, as they play a strategic role in the development of incentives for biodiversity conservation and sustainable use. Further cooperative work might include:

- (a) Continued exploration of methodologies for valuation of biodiversity and biodiversity resources;
- (b) Developing and refining non-market methods of valuation;
- (c) Disseminating information on existing techniques for valuation.

13. Work on valuation could be undertaken as a core component of an action plan in partnership with relevant international organizations.

Interlinkages between multilateral environmental agreements (MEAs)

14. There is a need to examine the policies and programmes under different multilateral environmental agreements to ensure that they provide mutually reinforcing incentives. In this respect, the Conference of the Parties noted the joint work programme between the Convention on Biological Diversity and the Convention on Wetlands (Ramsar, Iran, 1971), which includes a focus on incentives, and suggested attention to incentives with regard to other linkages, such as the Convention to Combat Desertification with regard to dryland biodiversity, and the Convention on International Trade in Endangered Species of Wild Fauna and Flora with respect to conservation and sustainable use of species, and the United Nations Framework Convention on Climate Change with respect to land-use change and forest biodiversity. In addition, the United Nations Framework Convention on Climate Change is encouraged to give priority to incentives to avoid deforestation, as a substantial amount of greenhouse gas emissions is due to the destruction of forests, the greatest terrestrial repository of biodiversity.

Linking biodiversity to macro-economic policies

15. It is important to explore the linkages with international organizations/agreements focused on economic policies, in particular trade policies under the World Trade Organization and other policies such

^{28/} Decision IV/10 of the Conference of the Parties to the Convention on Biological Diversity states that: "economic valuation of biodiversity and biological resources is an important tool for well-targeted and calibrated economic incentive measures".

as labour (the International Labour Organization) and health (the World Health Organization). In addition, linkages to regional and sectoral economic organizations/agreements should be explored to determine their incentive compatibility with the objectives of the Convention.

16. These linkages should not only be explored at the international level but also at the national level. In particular, the Conference of the Parties noted the need to link national biodiversity strategies and action plans with economic development strategies at the macro-economic public sector planning and sectoral levels, such as tourism, forestry, fisheries and agriculture.

Categories of incentive measures

17. The Conference of the Parties recognized that there is a vast array of incentive measures available. Measures should be tailored to the peculiarities of each situation and country. Consideration should also be given to coordination in the development of incentive measures for different sectors, in order to ensure their coherence.

Ecosystem focus

18. Assessments should be prioritized in line with the thematic programmes adopted by the Conference of the Parties. In this regard, the Conference of the Parties also noted the incentive focus in the joint programme of work between the Convention on Biological Diversity and Convention on Wetlands (Ramsar, Iran, 1971).

Pilot projects/case-studies/workshops

19. There is a need to launch pilot projects to strengthen the understanding and capacity to design, implement and assess incentive measures. Pilot projects could focus on a number of activities including awareness-raising, valuation studies, assessment of existing incentives, development of new incentive schemes and removal of barriers to incentives. Such pilot projects should have built-in linkages to existing initiatives under way in UNEP and other relevant organizations.

20. It is important that such pilot projects be country-driven and build the capacities of local institutions and policy makers.

21. Workshops can be valuable means to exchange both positive and negative experiences and best practices with respect to the design and implementation of incentive measures. Country-driven case-studies that reflect both the experiences of developing and developed countries could provide a good basis through which the strengths and weaknesses of specific incentive measures could be evaluated, taking into account the peculiarities of countries, ecosystems and sectors.

Role of international organizations

22. Competent international organizations are invited to support the efforts of Parties in their work on incentive measures, in particular through the dissemination of information, the provision of expertise and technical guidance, and training.

23. An inter-agency coordination committee should be established, based on the liaison group established by the Executive Secretary (including representatives from the Food and Agriculture Organization of the United Nations (FAO), the Organisation for Economic Co-operation and Development (OECD), the United Nations Conference on Trade and Development (UNCTAD), the United Nations Development Programme (UNDP), the United Nations Environment Programme (UNEP) and IUCN as

set out in decision V/15 of the Conference of the Parties) to coordinate activities at the international level, thus avoiding overlapping initiatives and activities while providing support to Parties. The committee should also include representatives from the World Bank and the secretariats of other relevant multilateral environmental agreements.